



Montana Army National Guard Environmental Assessment for the Development and Operation of a Limited Army Aviation Support Facility in Billings, Montana

DRAFT EA

April 2022



Environmental Assessment Organization

This Environmental Assessment (EA) evaluates the potential physical, environmental, cultural, and socioeconomic impacts associated with the development and operation of a Limited Army Aviation Support Facility (LAASF) in Billings, Montana.

The potential effects of this Federal Proposed Action are analyzed as required by the National Environmental Policy Act of 1969 (NEPA; *42 United States Code [U.S.C.] 4321 et seq.*), the Council on Environmental Quality (CEQ) Regulations Implementing the Procedural Provisions of NEPA (*40 Code of Federal Regulations [CFR] Parts 1500-1508*), and Environmental Analysis of Army Actions, Final Rule (*32 CFR Part 651; 29 March 2002*). This EA will facilitate the decision-making process regarding the Proposed Action and its alternatives, and is organized as follows:

- **EXECUTIVE SUMMARY:** Describes the Proposed Action and its considered alternatives; summarizes the physical, environmental, cultural, and socioeconomic effects; and compares potential effects associated with the two alternatives, the Preferred Alternative and the No Action Alternative.
- **SECTION 1. PURPOSE, NEED, AND SCOPE:** Summarizes the purpose of and need for the Proposed Action, provides relevant background and scoping information, and describes the scope of the EA.
- **SECTION 2. DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES:** Describes the Proposed Action and alternatives considered.
- **SECTION 3. AFFECTED ENVIRONMENT:** Describes relevant components of the existing physical, environmental, cultural, and socioeconomic setting (within the Region of Influence) of the considered alternatives.
- **SECTION 4. ENVIRONMENTAL CONSEQUENCES:** Identifies potential direct, indirect, and cumulative physical, environmental, cultural, and socioeconomic effects of implementing the Proposed Action and alternatives, and identifies proposed mitigation and management measures, where appropriate.
- **SECTION 5. COMPARISON OF ALTERNATIVES AND CONCLUSIONS:** Compares the environmental effects of the considered alternatives and summarizes the significance of individual and expected cumulative effects of these alternatives.
- **SECTION 6. REFERENCES:** Provides bibliographical information for cited sources.
- **SECTION 7. LIST OF PREPARERS:** Identifies document preparers and their areas of expertise.
- **SECTION 8. AGENCIES AND INDIVIDUALS CONSULTED:** List agencies and individuals consulted during the preparation of the EA.

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Environmental Assessment Signature Page

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TITLE OF PROPOSED ACTION: Development and Operation of a Limited Army Aviation Support Facility in Billings, Montana

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ABSTRACT:

The Army National Guard prepares helicopter crews to effectively fight and serve on missions from security and combat to disaster relief and rescue operations. This Environmental Assessment addresses the Montana Army National Guard proposal to expand aviation capabilities to the eastern portion of Montana to better accommodate soldier training and the community by having assets more readily available in that geographic region. The additional aviation support to serve eastern Montana is needed to improve coverage and availability for military training and emergency response, and to reduce costs by reducing flight time to eastern Montana.

The Proposed Action is to station up to six helicopters at an existing hangar located west of the Billings Logan International Airport and to operate a Limited Army Aviation Support Facility from that location. The No Action Alternative is to serve eastern Montana training and emergency response activities from the Army Aviation Support Facility in Helena, Montana.

Each alternative is assessed for its environmental effects on land use, air quality, noise, water resources, biological resources, socioeconomics, environmental justice, infrastructure, and hazardous and toxic materials and wastes. Geology, topography, and soils; prime and unique farmland; surface water, wetlands, and floodplains; and cultural resources are also considered but eliminated from further analysis because they are either not present or not affected.

Executive Summary

Introduction

In Montana and around the country, the Army National Guard (ARNG) prepares helicopter crews to effectively fight and serve on missions from security and combat to disaster relief and rescue operations. These flight operations are flown out of Army Aviation Support Facilities or AASFs. An AASF is a facility that provides maintenance, modification of ARNG equipment, operations, and logistical support for seven or more ARNG aircraft. There are approximately 100 AASFs situated around the country, and only one is in Montana. Montana Army National Guard (MTARNG) operates an AASF at the Helena Regional Airport in western Montana. The Helena AASF is co-located with the Helena Aviation Readiness Center (HARC) and a hangar for fixed-wing Beechcraft C-12 Huron transport aircraft. The 1-189th General Support Aviation Battalion is stationed at this location, and here, MTARNG trains soldiers, maintains and repairs helicopters, and when needed, deploys personnel to address emergency or military situations. Flights leave and return via the Helena Regional Airport runway.

Due to Montana's vast size and terrain, Billings has historically been used by the MTARNG for refueling. In addition, when time and weather permit, the MTARNG uses the Billings Airport to support firefighting efforts and troop movement to Waco Limited Training Area (approximately 47 miles east of Billings). Flights to Waco Limited Training Area occur less than 10 times per year due to weather and the distance from Helena. The MTARNG aviation receives 10-12 additional mission requests from search and rescue, local, state, and federal agencies on average per year that cannot be supported due to the weather and travel distance (approximately 175 miles by air and 218 miles by road) and logistics from Helena to Billings and the eastern side of the state. The challenge is compounded by limitations due to the number of hours a crew can fly per day, local weather conditions that include turbulence that may limit flight out of Helena, and the travel time for personnel in eastern Montana to commute to Helena only to fly back to eastern Montana for the mission. These constraints often prevent MTARNG aviation from supporting the units and local communities on the eastern side of the state.

MTARNG seeks to expand aviation capabilities to the eastern portion of Montana to better accommodate soldier training and the community by having assets more readily available locally. The Proposed Action is to operate a Limited AASF (LAASF) out of an existing hangar in eastern Montana. An LAASF provides the same functions as an AASF but supports six or fewer aircraft.

MTARNG has prepared this Environmental Assessment (EA) to analyze the potential environmental impacts of operating an LAASF at a new location. This EA has been prepared in accordance with the National Environmental Policy Act of 1969 (NEPA) (*42 United States Code 4321 et seq.*), the Council on Environmental Quality Regulations Implementing the Procedural Provisions of NEPA (*40 Code of Federal Regulations [CFR] Parts 1500-1508*), and *32 CFR Part 651 (Environmental Analysis of Army Actions, Final Rule)*.

Purpose and Need

The purpose of the Proposed Action is to increase National Guard readiness and expand MTARNG aviation capabilities and fill an existing coverage deficiency for helicopters reaching portions of eastern Montana. The Proposed Action is needed to provide soldiers on the eastern side of the state with more accessible training, improve response time to assist in emergency

situations, increase training opportunities with Montana National Guard Units, interagency partners, reduce operational costs, and positively affect recruiting and retention of National Guard personnel.

Alternatives Considered

During the initial alternatives development, six locations were considered: Billings, Glasgow, Glendive, Laurel, Lewistown, and Miles City (refer to EA Figure 2-2). Glasgow, Glendive, and Lewistown were eliminated early in the screening process because of their rural setting, a lack of local MTARNG aviation soldiers and, in the case of Glasgow, the amount of aviation coverage that would be provided. Three locations—Billings, Laurel, and Miles City—were carried forward for more detailed screening.

The three alternatives were screened based on six screening criteria. These include whether the site:

- 1) is located to provide aviation coverage for the “coverage gap” depicted in EA Figures 1-1 and 1-2
- 2) is located adjacent to an airport with related services
- 3) has a hangar sufficiently sized to accommodate up to six aircraft with room for future expansion
- 4) is in proximity to potential noise receptors
- 5) has sufficient population base/economy
- 6) is in proximity to training areas

Proposed Action

The Billings location was the only alternative that meets all the screening criteria and fulfills the purpose and need of this project. This location would provide improved coverage in eastern Montana, remedying the gaps in aviation coverage. The Billings Logan International Airport has all requisite services for MTARNG, including air traffic control and tower, radar, and fire response. In addition, the proposed location is the furthest from residential development and located in an area neighbors are accustomed to aircraft noise. Stationing the LAASF in Billings is the MTARNG's Preferred Alternative and is evaluated in detail in this EA.

Under the Preferred Alternative, the LAASF would be located in a hangar that MTARNG currently leases from the privately-owned Billings Flying Service (BFS), located immediately west of the Billings Logan International Airport (refer to Figure 2-3). BFS operates similar helicopter activities out of the adjacent hangar and helicopter pad. The property is accessed from Highway 3 via AJ Way. Up to two temporary portable offices would be located on the property adjacent to the hangar. Personal vehicles would be parked in the gravel or asphalt lot adjacent to the hangar. The hangar is served by electricity and a septic system. Water is provided via a cistern. MTARNG would develop and execute a plan to sample and test the quality of drinking water. In 2019, Montana Department of Military Affairs entered into an agreement with BFS to lease hangar space. Under the Preferred Alternative, MTARNG would begin operations out of this hangar.

The 14 full-time personnel would live in their personal residences in Billings or the surrounding area and commute to the hangar daily. On drill weekends, the estimated 90 personnel would travel to the hangar from their residences. Given that Billings is the largest community in

Montana and has a higher number of MTARNG personnel living there compared to other locations, it is estimated that 30-40 soldiers would stay in local hotels during drill weekends.

Maintenance hover runs or flights would be 50-60 minutes or less per aircraft, when required, and would be conducted at the airport, or on-site when required, away from established buildings. Maintenance test flights would follow established flight patterns north of Billings. No more than two maintenance test flights per helicopter per week are anticipated. Current training operations include 10-12 trips to Waco Limited Training Area per year, which is anticipated to increase under the Preferred Alternative due to the location of the LAASF.

Operating an LAASF out of Billings would benefit the people of Billings and eastern Montana as well as visitors. MTARNG would be more readily available to assist in responses to emergencies. The MTARNG would be able to aid local search and rescue services, along with assisting local law enforcement when needed. Locating the LAASF in Billings would be beneficial to the MTARNG aviation program because there are a number of opportunities for students to learn to fly, particularly since Rocky Mountain College has an aviation program. In addition, Rocky Mountain College and Montana State University Billings have Reserve Officers' Training Corps programs that could provide an additional potential source of officers to the MTARNG aviation program. Operating out of Billings would benefit the retention of current National Guard members by decreasing commuting distance to perform their military duties. The LAASF in Billings would also increase potential recruiting opportunities.

No Action Alternative

Under the No Action Alternative, no new aviation facilities would operate on the eastern side of Montana. Training and emergency responses would continue to occur out of Helena. Emergency response by MTARNG to eastern Montana would require the time to mobilize, fly from Helena to Billings (approximately 1.5 hours) and refuel (approximately 1 hour) when weather permits. MTARNG personnel from eastern parts of Montana would travel to Helena monthly for drill weekends. Flights to Waco Limited Training Area would occur less than 10 times out of Helena.

Public and Agency Involvement

Federal agencies, federally recognized Native American tribes, state agencies, and local agencies were all requested to contribute to this EA through the Interagency/Intergovernmental Coordination of Environmental Planning process, which assisted the MTARNG in determining the appropriate scope for this EA. Consideration of the views and information from all interested persons promotes open communication and enables better decision making by the MTARNG and National Guard Bureau. All persons and organizations having potential interest in the Proposed Action, including minority, low income, and disadvantaged communities are urged to participate in the NEPA environmental analysis process. **Table ES-1** provides the responses received during the scoping period.

1 **Table ES-1. Scoping Responses Received**

Agency/Organization	Comment	Date Received
Billings Police Department	An increase in traffic during drill weekends is anticipated.	08/17/2021
Billings Public Works	No environmental issues and information regarding nearby development and storm water system was provided.	08/20/2021
U.S. Fish and Wildlife Service	No comments or concerns were identified.	08/19/2021
Yellowstone County Commissioner	There is normal traffic in the area and no issues or concerns.	08/17/2021

2 Eleven Tribes were contacted, and no Tribes responded. Since this project does not include
3 construction and only the in-kind use of a hangar constructed in 2019, no National Historic
4 Preservation Act Section 106 consultation was undertaken; however, prior to the release of the
5 Draft EA for public comment, letters were sent to the Tribes, Tribal Historic Preservation Offices,
6 and the State Historic Preservation Offices to notify each that the Draft EA is available for
7 review from April 18 to May 19, 2022, how to access it, and providing information on requesting
8 a copy of the document if unable to access it via the internet. In addition, MTARNG will follow up
9 with each party during the EA review to provide opportunity to provide comment. Continuing
10 coordination with these parties will take place throughout the NEPA process. All cultural
11 resources consultation parties are identified in Section 8, and a draft scoping letter is included in
12 EA Appendix D.

13 The opportunity for additional agency and public input will be provided during a 30-day public
14 comment period following MTARNG's completion of the Draft EA and a subsequent 30-day
15 public review period following the Final EA and Draft FNSI. The document will be available upon
16 request and in the Billings Public Library. Persons interested in receiving the EA or the FNSI
17 may contact Rebekah Myers at the Montana Department of Military Affairs Environmental
18 Office. Notices of Availability announcing the availability of these documents will be published in
19 the Billings Gazette. During the initial public comment period, comments received by the
20 MTARNG will be addressed and incorporated into the Final EA. The MTARNG will reply directly
21 to comments received during the second public comment period.

22 Environmental Consequences

23 The Proposed Action was evaluated to determine its potential direct or indirect impact(s) on the
24 physical, environmental, cultural, and socioeconomic aspects of the installation and surrounding
25 area. Resource areas evaluated include:

- *Land Use*
- *Air Quality*
- *Noise*
- *Water Resources*
- *Biological Resources*
- *Cultural Resources*
- *Socioeconomics and Safety*
- *Environmental Justice*
- *Infrastructure*
- *Hazardous and Toxic Materials and Wastes*

26 The Preferred Action Alternative would result in the impacts identified throughout **Section 4.0**.
27 **Table ES-2, Summary of Impacts** includes a discussion of potential impacts associated with
28 the operation of an LAASF in Billings; no construction is included in this action.

1 Table ES-2. Summary of Impacts

Resource Area	No Action Alternative	Preferred Action Alternative
Land Use	No impact would occur.	No changes in land use, lighting, or visual character. Consistent with existing land use plans and zoning and would not interfere with future development plans. No impact would occur.
Air Quality	No changes in pollutant emissions including Greenhouse Gases (GHGs) would occur. Existing operations would continue from the Helena AASF.	Emissions associated with operations of the LAASF would be small (less than 3 tons per year) and well below the General Conformity Thresholds. There would be an increase in GHG emissions because the LAASF would require heating and electricity to operate in addition to the existing emissions from Helena AASF. Mobile GHG emissions associated with the use of helicopters and other vehicles for training would be the same as existing operations but would be released in Billings instead of Helena. Emissions for commuting to Billings for emergencies would be reduced. Operating from the LAASF would result in a minor increase in GHG emissions, and those emissions generated would continue to contribute to climate change.
Noise	No impact would occur.	While there would be minor increases in noise levels due to the Proposed Action, noise levels at all Points of Interest that were modeled would meet federal, state, and local noise regulations. The changes in noise would not result in any incompatible land use. Only three percent of the flights would occur at night, so nighttime noise is not anticipated to be elevated regularly.
Biological Resources	No impact would occur.	The Proposed Action is near an existing airport where wildlife is habituated to noise. Increased vehicle and helicopter use could result in injury to wildlife infrequently including migratory birds. Impacts would be minor.
Cultural Resources	No impact would occur.	The Proposed Action would consist of an in-kind use of an existing hangar constructed in 2019 and flight along existing flight paths. No construction would occur. No historic properties would be directly affected. No adverse indirect effects due to visual or auditory changes.
Water Resources	No impact would occur.	There are no surface waters, wetlands, or floodplains on the subject property. Increased demand on septic tank would not overwhelm the tank capacity. Potential to discharge petroleum products or other chemicals due to fueling, maintenance, and operation of helicopters is unlikely due to standard practices such as secondary containment. No impact is anticipated.
Socioeconomics and Safety (including Environmental Justice and Protection of Children)	No impact would occur.	Negligible benefit due to increase in demand for hotels and restaurants and 14 full-time positions. Local emergency services would not be negatively affected and the likelihood of a crash over a populated area is negligible. No Environmental Justice populations occur near the site. Children would not be placed at an increased risk. Increased availability for MTARNG to respond to large-scale or technically challenging emergencies would benefit eastern Montana.
Infrastructure	No impact would occur.	Negligible impacts to vehicular traffic during drill weekends and to air traffic during training days and operations. Negligible increase in demand for utility services.
Hazardous and Toxic Materials and Waste	Continued potential for accidental petroleum, oil, or lubricant spills during aircraft refueling, general maintenance, or parking personal vehicles at the Helena AASF.	Potential for accidental petroleum, oil, or lubricant spills during aircraft refueling, general maintenance, or parking personal vehicles at the LAASF would be negligible due to the standard practices including secondary containment.

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LIST OF ACRONYMS

1

°F	degrees Fahrenheit
AASF	Army Aviation Support Facility
AFCEC	Air Force Civil Engineer Center
ANSI	American National Standards Institute
APE	Area of Potential Effect
APU	Auxiliary Power Unit
AR	Army Regulation
ARNG	Army National Guard
AT	Annual Training
ATC	Air Traffic Control
BFS	Billings Flying Service
BG	Block Group
BMP	Best Management Practice
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CH-47	Chinook
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
CT	Census Tract
dB	decibels
dBA	A-weighted decibels
DNL	Day-Night Average Sound Level
DoD	Department of Defense
EA	Environmental Assessment
EIS	Environmental Impact Statement
ESA	Endangered Species Act
FICON	Federal Interagency Committee on Noise
FICUN	Federal Interagency Committee on Urban Noise
FNSI	Finding of No Significant Impact
FY	Fiscal Year
GHG	greenhouse gas
HARC	Helena Aviation Readiness Center
HEMTT	Heavy Expanded Mobility Tactical Truck
ICUZ	Installation Compatible Use Zone
IICEP	Interagency/Intergovernmental Coordination of Environmental Planning
LAASF	Limited Army Aviation Support Facility
LFP	low flight pattern
LTO	landing and take-off
MBMG	Montana Bureau of Mines and Geology
MDMA	Montana Department of Military Affairs
MTARNG	Montana Army National Guard
MTCRIS	Montana Cultural Resources Information System
MTNHP	Montana Natural Heritage Program
NEPA	National Environmental Policy Act
NGB	National Guard Bureau
NOA	Notice of Availability

LIST OF ACRONYMS

NRHP	National Register of Historic Places
POI	Points of Interest
RCRA	Resource Conservation and Recovery Act
RPLANS	Real Property Planning and Analysis System
SHPO	State Historic Preservation Office
SPCC	Spill Prevention, Control, and Countermeasure
UH-60	Blackhawk
UH-72	Lakota
U.S.C.	United States Code
USEPA	U.S. Environmental Protection Agency
USFWS	United States Fish and Wildlife Service

SECTION 1.0

Purpose and Need for the Proposed Action

1.1 Introduction

In Montana and around the country, the Army National Guard (ARNG) prepares helicopter crews to effectively fight and serve on missions from security and combat to disaster relief and rescue operations. These flight operations are flown out of Army Aviation Support Facilities or AASFs. An AASF is a facility that provides maintenance, modification of ARNG equipment, operations, and logistical support for seven or more ARNG aircraft. There are approximately 100 AASFs situated around the country, and only one is in Montana. Montana Army National Guard (MTARNG) operates an AASF at the Helena Regional Airport in western Montana. The Helena AASF is co-located with the Helena Aviation Readiness Center (HARC) and a hangar for fixed-wing Beechcraft C-12 Huron transport aircraft. The 1-189th General Support Aviation Battalion is stationed at this location, and here, MTARNG trains soldiers, maintains and repairs helicopters, and when needed, deploys personnel to address emergency or military situations. Flights leave and return via the Helena Regional Airport runway.

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MTARNG seeks to expand aviation capabilities to the eastern portion of Montana to better accommodate soldier training and the community by having assets more readily available locally. The Proposed Action is to operate a Limited AASF (LAASF) out of an existing hangar in eastern Montana. An LAASF provides the same functions as an AASF but supports six or fewer aircraft.

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1.2 Purpose and Need

The purpose and need define what the action seeks to accomplish and why MTARNG needs this action.

1.2.1 Purpose of the Project

The purpose of the Proposed Action is to expand MTARNG aviation capabilities and fill an existing coverage deficiency for helicopters reaching portions of eastern Montana. This would provide soldiers on the eastern side of the state with more accessible training, improve response time to assist in emergency situations, increase training opportunities with interagency partners, and reduce operational costs.

1.2.2 Need for the Project

Additional aviation support to serve eastern Montana is needed to:

- Improve coverage and availability for military training and rescue response
 - Emergency response time
 - Prioritizing people and work-life balance
 - Enhance/expand training opportunities and enable flight operations
 - Military readiness
- Reduce costs
 - Reduced need for flights between Helena and locations in eastern Montana (fuel, time, aircraft wear and tear)
 - Reduced commuting miles for training/duty for soldiers

A location is needed that has or can accommodate a hangar for the helicopters needed for training. In addition, air traffic control, preferably with radar, is needed so training can take place in all weather conditions.

Existing Coverage

The service range from each ARNG aviation facility is limited by the capabilities of the aircraft. Blackhawk or UH-60 helicopter and the Chinook or CH-47 are the two most commonly used airframes for MTARNG. The Blackhawk has a shorter flying range than the Chinook but is more readily available regionally, as North Dakota Army National Guard (NDARNG) flies Blackhawks out of Bismarck, North Dakota, which when requested provide some additional coverage of the eastern part of Montana. Conversely, the Chinook, which is needed to move heavier loads or to carry more people, only flies out of Helena in the region, with the nearest support flying out of in Colorado Springs, Colorado and St. Cloud, Minnesota; therefore, Chinook coverage and support is very limited in eastern Montana. The overlapping circles on Figure 1-1 and Figure 1-2 depict the available range and coverage for each airframe. The inner circle roughly represents the round-trip range, and the outer circle is the distance the helicopter could travel in one direction. A large “coverage gap,” or area with no aviation asset coverage, currently stretches from central Montana to northern Wyoming and over to western North and South Dakota. Increasing the aviation coverage in eastern Montana would remediate the “coverage gap.”

In addition to the insufficient aviation coverage, MTARNG has insufficient physical infrastructure to support aviation operations. Real Property Planning and Analysis System (RPLANS) is a program managed by National Guard Bureau that calculates facility authorizations to compare with recorded data in the Army National Guard Real Property Database of Record. This analysis results in the documentation of any shortage or excess of property. Based on *National Guard Pamphlet 415-12* regarding facility allowances and RPLANS, MTARNG is allocated 154,618 square feet of AASF. The Helena AASF only provides 104,077 square feet, resulting in a 50,541 square foot shortfall (MTARNG 2021b). The addition of an LAASF would help reduce this shortfall.

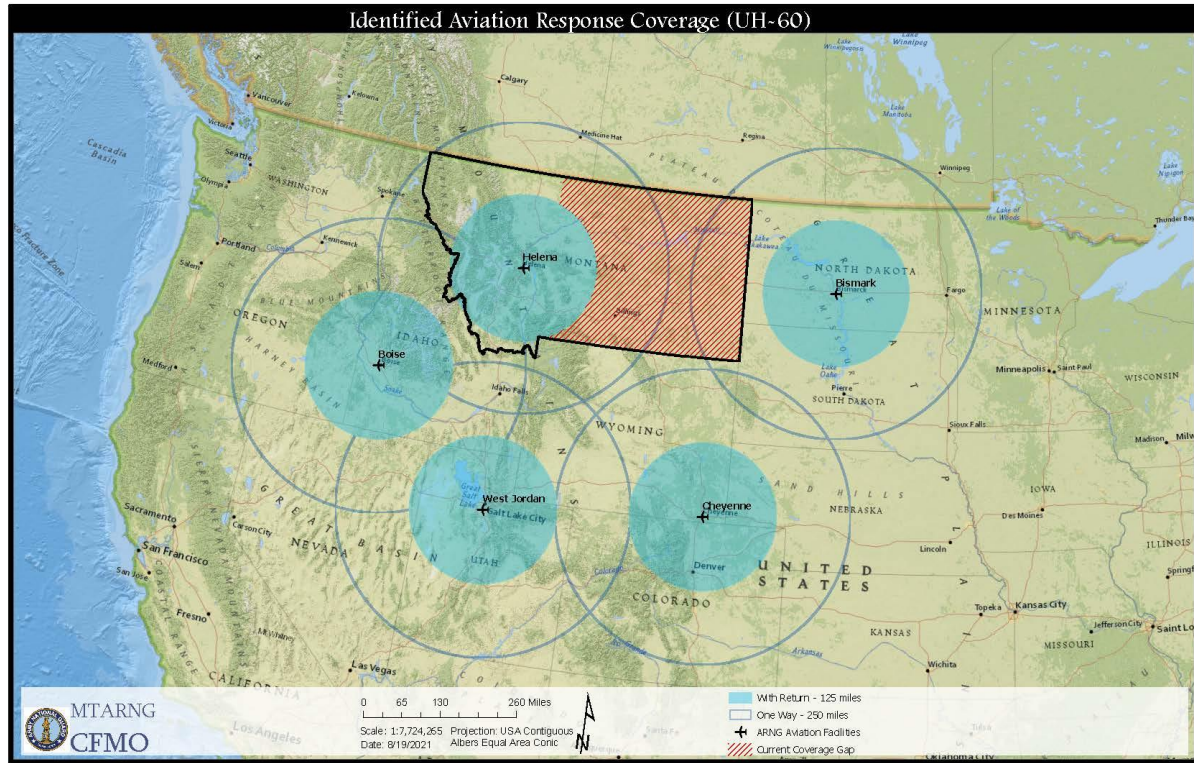


Figure 1-1. Aviation Response Coverage for the Blackhawk Helicopter

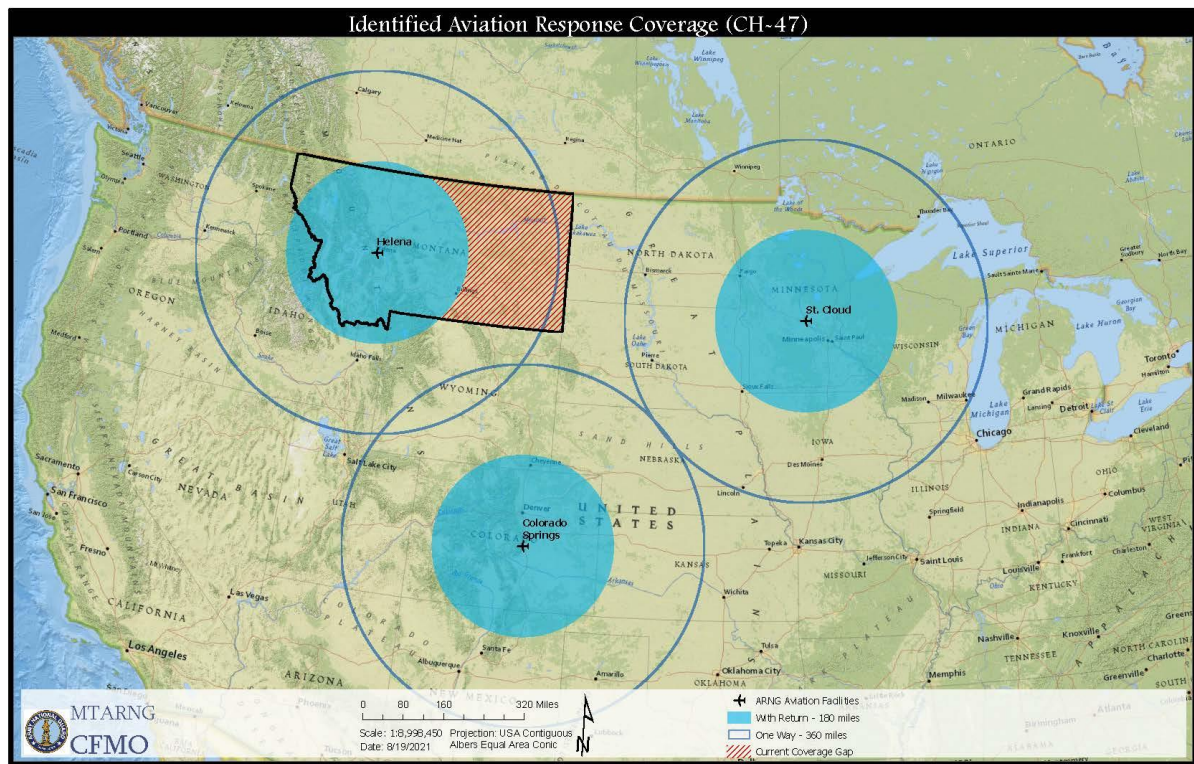


Figure 1-2. Aviation Response Coverage for the Chinook Helicopter

ARNG building specs for an LAASF basic allotment include 12,355 square feet (plus additional square footage per aircraft) which includes the hangar that supports drive train allied shops, airframe and structural shops, electronic and avionics allied shops, tech supply, contractor shop and storage, and bulk material storage; unheated storage; administrative and training areas, operations, aviation life support equipment shop, maintenance administrative area, information technology space, locker rooms, break/assembly area, and toilet/shower area (NG PAM 415-12 Table 4-2 and Table 4-3). MTARNG does not currently have funding/approval for construction of an official ARNG LAASF. Instead, MTARNG proposes to occupy leased space from which aviation operations can be conducted. MTARNG aviation experts and NGB aviation experts concluded that the leased hangar in Billings meets the basic requirements for an official LAASF as identified above. While the leased hangar is non-standard, it meets their purpose and need of this proposal.

Prioritizing People and Work-Life Balance

MTARNG 1-189th Aviation Battalion has eight drill weekends and 15-days of annual training every year. Aviation training requirements are greater than the traditional Guard Soldier due to aircrew training requirements for a minimum of 48 flight hours per semiannual period. Currently, all aviation soldiers statewide must travel to Helena to attend training. For aviators and support crew living in eastern Montana, this distance can add three or more hours each way onto their travel time. This additional time away from home can result in stressors in the workplace for the businesses having to accommodate the additional missed work as well as on the families of soldiers. Further, lengthy travel following long weekends can add a safety risk while on the road, particularly during inclement weather. Increasing training opportunities for MTARNG soldiers in the eastern side of the state would alleviate these issues, improving overall readiness and retention. Improving access to training is consistent with the Chief of Staff of the Army General McConville's goals to prioritize people and encourage work-life balance (McConville 2021). Prioritizing people increases readiness through recruiting and retention, and personnel being available to train.

Improve Emergency Response Times

MTARNG provides additional support to local and state emergency response teams in compliance with DoD Instruction 3025.18, Joint Publication 3-28, DoD Instruction 2002.01, and DoD Directive. MTARNG has a duty to respond to life threatening and property damaging emergencies. MTARNG aviation assets have assisted with emergency situations ranging from dropping water on wildfires to search and rescue and evacuations complete with in-flight medics who can administer lifesaving and palliative medicine during transport. For example, MTARNG aviation was called upon to rescue a kayaker from the Yellowstone River. This rescue required the capability to perform the extraction at night, using night vision equipment. In another example, MTARNG's Chinook helicopters were used to evacuate 137 adults and children when flooding washed out the roads leading to their summer camp. The special training and capabilities allow the MTARNG to respond to technical rescues and emergency situations when other services may not be able. These situations benefit the communities of Montana, as well as the MTARNG in having opportunities to implement their training.

When an emergency call in eastern Montana is responded to out of Helena (regardless of airframe), it takes time for military personnel to report to the AASF from their homes, conduct pre-flight procedures, and fly to the emergency. Further, refueling may be required to safely reach the incident and return to an acceptable landing location with necessary services. An additional location in eastern Montana would help improve these response times and services.

Increase Training Opportunities

Expanding operations into eastern Montana would provide additional opportunities for training and interagency partnering. An easterly location would allow for improved access to training areas in eastern Montana. This would allow more time to be spent training than in transit to training activities, which in turn increases overall readiness. In addition, over the next 5 years, MTARNG will partner with South Dakota, North Dakota, and Canada to increase training using long-distance convoy and air routes. Operating on the eastern side of Montana would facilitate this type of training.

MTARNG is an agency within the Eastern Montana High Intensity Drug Trafficking Area City/County Special Investigations Unit task force. Other agencies in this task force include the Federal Bureau of Investigation, Drug Enforcement Agency, Department of Homeland Security, and U.S. Customs and Border Patrol. A High Intensity Drug Trafficking Area is an area with increased drug organizations and activity. When assistance is needed, there is very little lead time. The added flight time from Helena can make MTARNG assistance infeasible. Along these same lines, increased aerial coverage may provide opportunities to work with the Crow and Northern Cheyenne Tribes by providing increased surveillance and presence for countering drugs and human trafficking. This type of work provides realistic low-level aviation training that increases MTARNG readiness while performing an important service to local communities.

Reduce Operating Costs

Introducing operations in eastern Montana would reduce costs for the MTARNG and make more efficient use of taxpayer money. By reducing or eliminating the need to fly between Helena and Billings to respond when needed, there would be a savings in flight time, aircraft maintenance and wear/tear, fuel costs, and personnel travel and duty day costs. Similarly, if personnel train closer to home, commutes would be shorter, reducing the amount of traffic on roads and potential for safety concerns. Augmentation to existing emergency services would be more readily available and accessible. In addition, the reduced miles traveled (both by personal vehicle and helicopter) would decrease emissions and demand on fossil fuels.

1.3 Scope of the EA

This EA evaluates the development and operation of an LAASF in the eastern part of Montana. The action would include the stationing of up to six helicopters (including but not limited to the CH-47, UH-60, and UH-72 [Lakota]), staffing up to 14 full-time positions, conducting drill weekend activities, and performing light maintenance on the helicopters. Several locations were considered, including Billings, Glasgow, Glendive, Laurel, Lewistown, and Miles City. The different alternatives and the screening criteria and process are described in detail in Section 2.

Chapter 3 provides a description of the existing environment as it pertains to the analysis. Resources that are not anticipated to be affected are briefly discussed at the beginning of Chapter 3, and those resources that are anticipated to be affected are described in more detail. The Proposed Action does not include any construction, which minimizes the potential for environmental effects and the number of resources affected. Resources analyzed in detail include land use; air quality; noise; biological resources; socioeconomics including Environmental Justice, Native American Resources, and Protection of Children; infrastructure; and hazardous and toxic materials and waste. Technical reports that provide additional detail for most resources analyzed are included in the appendices.

The anticipated impacts of the proposed action and the no Action Alternatives are addressed in Chapter 4. This includes direct, indirect, and cumulative impacts. Both the Proposed Action and the No Action Alternative are evaluated in detail. The No Action Alternative provides a basis of comparison for the impacts identified for the Proposed Action. In addition, best management practices (BMPs) are identified that would help minimize the overall impact of the action, if implemented.

1.4 Decision-Making

Per 10 U.S.C. Sec. 10501, the National Guard Bureau (NGB) is a joint activity of the Department of Defense (DOD). Pursuant to DOD Directive 5105.77, National Guard Bureau, dated 30 October 2015, the NGB serves as the principal advisor to U.S. Army on matters involving the ARNG, and is responsible for implementing DOD guidance on the structure and strength authorizations of the ARNG. The NGB is responsible for ensuring that ARNG activities are performed in accordance with applicable policies and regulations. As such, the NGB is the lead federal agency responsible for preparation of NEPA-compliant documentation on projects for which the MTARNG is the proponent. In that capacity, the NGB is ultimately responsible for environmental analyses and documentation; however, the local responsibility for NEPA document preparation falls upon the MTARNG.

This EA analyzes the potential for significant effects associated with the Proposed Action and the No Action Alternative. If the analyses presented in this EA indicate that the Proposed Action would not result in significant adverse environmental or socioeconomic effects, then a Finding of No Significant Impact (FNSI) would be prepared. A FNSI briefly presents the reasons why a Proposed Action would not have a significant adverse effect on the human environment and why an Environmental Impact Statement (EIS) would not be necessary. If the analyses presented in this EA indicate that significant adverse environmental effects would result from the Proposed Action that cannot be mitigated to insignificance, a Notice of Intent to prepare an EIS would be required, or no action would be taken.

1.5 Public and Agency Involvement

The Interagency/Intergovernmental Coordination of Environmental Planning (IICEP) process consisted of sending a scoping letter to 44 federal, state and local agencies and federally recognized Native American tribes on August 6, 2021 (see Section 8.0 and Appendix E). The letter requested that agencies provide information and identify issues or concerns associated with the Proposed Action. This information helps frame the scope of the EA. Four response letters were received and are summarized in Table 1-1.

Table 1-1. Scoping Responses Received

Agency/Organization	Comment	Date Received
Billings Police Department	An increase in traffic during drill weekends is anticipated.	08/17/2021
Billings Public Works	No environmental issues and information regarding nearby development and storm water system was provided.	08/20/2021
U.S. Fish and Wildlife Service	No comments or concerns were identified.	08/19/2021
Yellowstone County Commissioner	There is normal traffic in the area and no issues or concerns.	08/17/2021

Eleven Tribes were included in scoping; none responded. While the State Historic Preservation Office (SHPO) was provided a scoping letter, no National Historic Preservation Act Section 106 consultation was undertaken because the project does not include construction and only entails the in-kind use of a 3-year-old hangar, helipad, and parking facilities, and existing, approved flight paths. Prior to the release of the Draft EA for public comment, letters were sent to the Tribes, Tribal Historic Preservation Offices, and the State Historic Preservation Offices to notify each that the Draft EA is available for review from April 18 to May 19, 2022, how to access it, and providing information on requesting a copy of the document if unable to access it via the internet. In addition, MTARNG will follow up with each party during the EA review to provide opportunity to provide comment.

Consideration of the views and information from all interested persons promotes open communication and enables the MTARNG and NGB to make better decisions. All persons, organizations having potential interest in the Proposed Action, including minority, low income, disadvantaged communities, are urged to participate in the NEPA environmental analysis process.

An opportunity for agency and public input on the Draft EA is provided during the 30-day public comment period from April 18 to May 19, 2022, and a subsequent 30-day public review period following the Final EA and Draft FNSI. The document is available upon request and in the Billings Public Library located at 510 North Broadway, Billings, Montana, 59101. Persons interested in receiving the EA or the FNSI may contact Rebekah Myers at the Montana Department of Military Affairs (MDMA) Environmental Office by emailing Rebekah.L.myers2.nfg@army.mil. A Notice of Availability (NOA) announcing the document was published in the *Billings Gazette* and via e-mail blast by the *Billings Gazette* on Sunday, April 17, 2022. In addition, the Draft EA is found on the landing page for the MTARNG website at www.mt.gov/dma/CFMO/index. During the initial public comment period, responses received by the MTARNG will be addressed and incorporated into the Final EA. The ARNG will reply directly to comments received during the second public comment period.

Comments may be sent via email to Rebekah.L.Myers2.nfg@army.mil or postal mail to:

Rebekah Myers, DMA Environmental Bureau/NEPA Specialist
JFHQ-MT
1956 Mt. Majo Street
Fort Harrison, MT 59636

1.6 Related NEPA, Environmental, and Other Documents and Processes

Planning and environmental documents relevant to the Proposed Action that were reviewed during preparation of this EA include, but are not limited to, the following:

- American National Standards Institute, Inc. (ANSI). 2003. *American National Standard Quantities and Procedures for Description and Measurement of Environmental Sound, Part 5: Sound Level Descriptors for Determination of Compatible Land Use*, ANSI S12.9/Part 5-1998 (R 2003).
- Federal Interagency Committee on Noise (FICON). 1992. *Federal Agency Review of Selected Airport Noise Analysis Issues*. August.

- Federal Interagency Committee on Urban Noise (FICUN). 1980. *Guidelines for Considering Noise in Land-Use Planning and Control*. August.
- US Environmental Protection Agency (USEPA). 1982. *Guidelines for Noise Impact Analysis, Report 550/9-82-105 and #PB82-219205*. April.

1.7 Regulatory Framework

The Proposed Action and No Action Alternative are subject to the following federal environmental regulations:

- Aviation Flight Regulations (*Army Regulation [AR] 95-1, Supplement 1*)
- Bald and Golden Eagle Protection Act (*16 U.S.C. §668-668d*)
- CEQ Update to the Regulations Implementing the Procedural Provisions of the NEPA (*40 CFR 1500 – 1508, 1515-1518*)
- Clean Air Act, as amended (*42 U.S.C. §7401 et seq.*) Clean Air Act Amendments of 1990
- Environmental Analysis of Army Actions (*AR 200-1; 32 CFR 651*)
- Oil Pollution Prevention in the Clean Water Act (*40 CFR 112 §311*)
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 (*42 U.S.C. §9601 et seq.*)
- Endangered Species Act (ESA) of 1973 (*16 U.S.C. §1531 et seq.*)
- Real Property Master Planning for Army Installations (*AR 210-20*)
- *Executive Order 11988*, Floodplain Management
- *Executive Order 11990*, Protection of Wetlands
- *Executive Order 12898*, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations
- *Executive Order 13007*, Indian Sacred Sites
- *Executive Order 13045*, Protection of Children from Environmental Health Risks and Safety Risks
- *Executive Order 13175*, Consultation and Coordination with Indian Tribal Governments
- Federal Facilities Compliance Act (*Public Law 102-386*) of 1992
- Force Development and Documentation Consolidated Procedures (*Department of the Army Pamphlet 71-32*)
- Migratory Bird Treaty Act, as amended (*16 U.S.C. §703-712*)
- National Historic Preservation Act (NHPA) Section 106 (*36 CFR 800*)
- National Pollutant Discharge Elimination System (*40 CFR 122*)
- NEPA, as amended (*42 U.S.C. §4321-4347*)
- Noise Control Act, (*42 U.S.C. §4901 et seq.*)
- Resource Conservation and Recovery Act (RCRA) of 1976 (*42 U.S.C. §6901 et seq.*)
- Safe Drinking Water Act (*42 U.S.C. §300f et seq.*)
- Toxic Substances Control Act of 1976 (*15 U.S.C. §2601 et seq.*)
- U.S. Army Installation Policy to Address Threats Caused by Changing Climate and Extreme Weather (*Army Directive 2020-08*)

SECTION 2.0 Description of the Proposed Action and Alternatives

2.1 Introduction

This section describes the alternatives analysis process and the screening criteria MTARNG used to evaluate the alternatives.

2.2 Proposed Action

The Proposed Action is to operate an LAASF in eastern Montana. The LAASF would operate out of a 12,000 square foot hangar that MTARNG currently leases (Figure 2-1). The hangar is located immediately adjacent to the airport which has approach control including air traffic control (ATC) tower, fire and rescue services, and preferably radar for safety during training, runway access, and utilities. The lease includes 1,916 square yards of combined apron and parking and joint use of the helipad onsite. All surfaces are paved or gravel. None of the land adjacent to the hangar is included in the lease. The LAASF would begin operations at the end of federal Fiscal Year (FY) 2022, which concludes 30 September 2022, or FY 2023 and operate with federal funding once appropriate leasing and clearances are approved. A hangar with sufficient capacity for up to six (6) aircraft would fulfill short-term needs (approximately 5 to 10 years), but a larger, long-term facility would be needed in the future to accommodate the emerging growth needs and coverage requirements of the MTARNG aviation assets.

The LAASF would be staffed by up to 14 full-time personnel, including four mechanics, two flight operators, and one of each of the following, avionics, technical supply, production control officer, maintenance test pilot, quality assurance officer, OIC, instructor pilot, and maintenance supervisor. Personnel would live in their personal residences in the surrounding area.

During the drill weekends, up to 90 personnel would be stationed in Billings from a leased hangar. These weekends would commence on either Thursday or Friday and conclude on Sunday evenings. Flights would occur primarily during the day, but at least one training flight per weekend would occur at night with the aircraft returning after dark, the timing of which would vary with the season. Out of town personnel would stay in local hotels during drill weekends. Daily lunch would be catered by a contracted local business. All other meals would be purchased at local restaurants, eaten at home, etc.

The LAASF would support up to six helicopters (including but not limited to the Chinook, Blackhawk, and Lakota; Figure 2-2). On weekdays, two to three helicopter training flights per day would originate from LAASF for a total of 10-15 flights per work week. The LAASF would support 2-3 flights per day on drill weekends for a total of 14-21 flights during a drill week. The LAASF would operate for one additional Saturday per month for two to three flights.



Figure 2-2. Leased Hangar



Figure 2-1. Helicopters supported by the LAASF

Top - Chinook,
Middle - Blackhawk,
Bottom - Lakota

Maintenance activities are anticipated to include maintenance hover runs or flights for every 100 hours of flight time or after 14-days of storage. The hover runs or flights would typically be 50-60 minutes or less per aircraft, when required, and hover runs would be conducted at the airport. An estimated 150 maintenance runs would occur per year. Refueling would be done on-site, using a 5,000-gallon over-the-road tanker. The MDMA Environmental Office would develop an SPCC plan. The unit would arrange for portable secondary containment for storing all fuel trucks. Other support vehicles that would potentially be used at the LAASF include light medium tactical vehicles, high mobility multipurpose wheeled vehicles, trailers, and a forklift.

Annual training (AT) would occur at the LAASF about once every five years, anticipated to begin in 2026. Unlike other AT events where multiple units may train together, only the unit assigned to the LAASF would participate at these periodic events. Training activities (number of people, flights, etc.) would be the same as on a drill weekend but would extend over a 15-day period.

Stationing, in compliance with *AR 5-10, Management, Stationing* and as identified herein, has been approved by the MTARNG and is in review with the MTARNG Force Stationing Committee for approval.

2.3 Alternatives Considered

Under NEPA and 32 *CFR Part 651*, this EA is required to analyze the potential environmental impacts of the Proposed Action, No Action Alternative, and reasonable alternatives. Reasonable alternatives are those that meet the underlying purpose of and need for the Proposed Action; are feasible from a technical and economic standpoint; and meet all screening criteria that are suitable to a particular action. Screening criteria may include requirements or constraints associated with operational, technical, environmental, budgetary, and time factors. Alternatives that are determined to not be reasonable can be eliminated from detailed analysis in this EA.

During the initial alternatives development, six locations were considered: Billings, Glasgow, Glendive, Laurel, Lewistown, and Miles City (Figure 2-3). Glasgow, Glendive, and Lewistown were eliminated early in the screening process because of their rural setting, a lack of local MTARNG aviation soldiers and, in the case of Glasgow, the amount of aviation coverage that would be provided. Three locations—Billings, Laurel, and Miles City—were carried forward for more detailed screening.

2.3.1 Alternatives Development (Screening Criteria)

Table 2-1 lists the primary criteria used to screen the alternatives considered for the operation of an LAASF.

Each location alternative was evaluated to determine if it meets the purpose of and need for the Proposed Action, is feasible from a technical and economic standpoint, and if it meets the screening criteria identified in Table 2-1. The requirement for features and operations described in Section 2.2, Proposed Action would be the same for each of the location alternatives.

Table 2-2 provides the results of the alternatives screening and the rationale for the screening decision. The shading indicates whether each alternatives fully meets each screening criterion (green), partially meets the criterion (yellow), or fails to meet the criterion (red). Screening criteria 1-3 are essential to meeting the purpose and need for the project. Failing to meet any of these three essential screening criteria indicates the alternative would not meet the purpose and need of the project. In these cases, the failing alternatives are eliminated from further consideration in this EA.

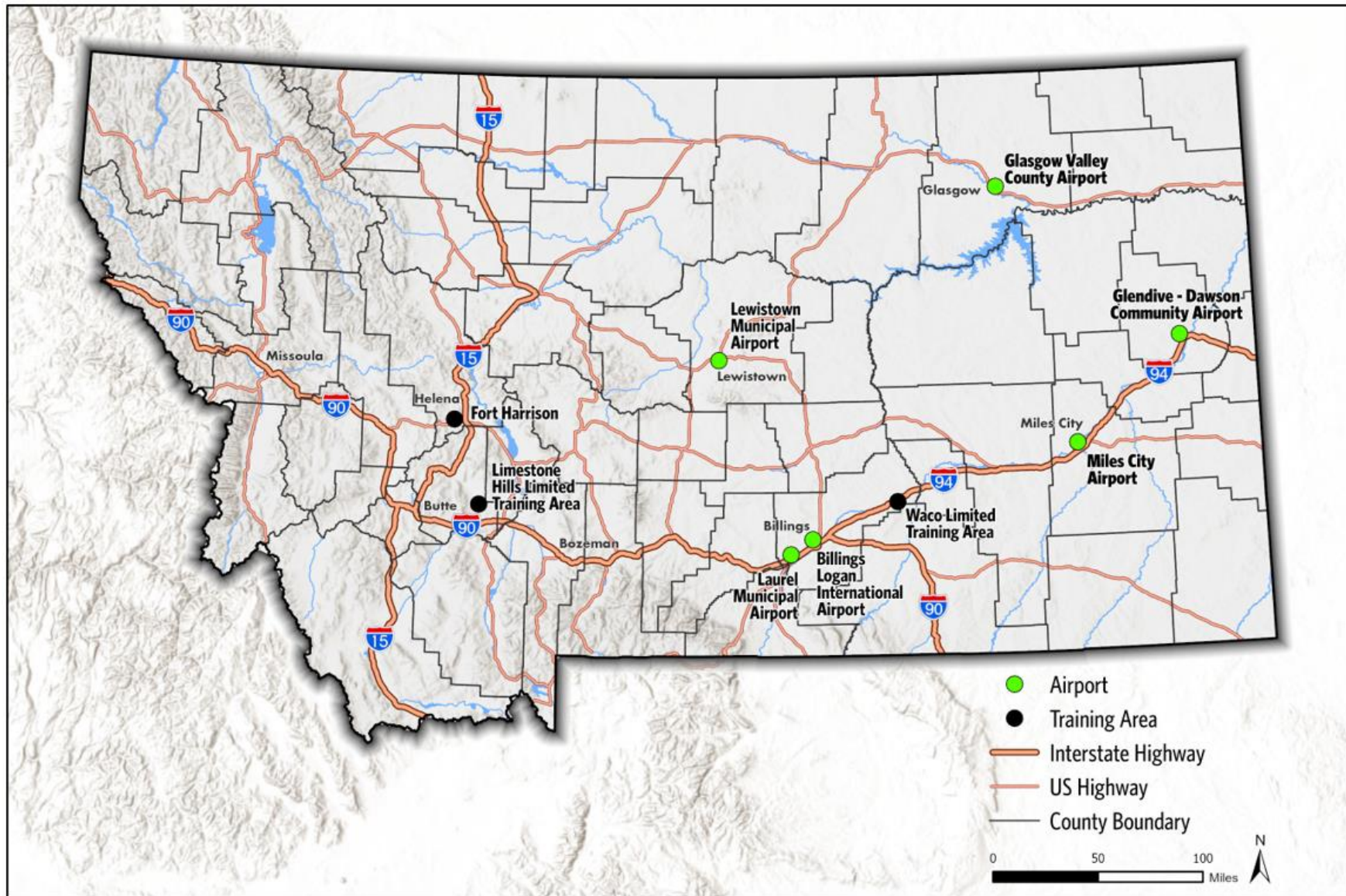
1 Table 2-1. Alternatives Screening Criteria

Screening Criteria	Description
1 – Located to provide aviation coverage for the “coverage gap” depicted in Figures 1-1 and 1-2	The proposed LAASF must be located to provide aviation support for operations in the portion of eastern Montana that currently has no coverage.
2 – Located adjacent to an airport with related services	The location must be at or adjacent to an airport that can support new helicopter operations. Services needed to support training include ATC, tower, approach control, radar (preferred), and fire rescue services.
3 – Hangar sufficiently sized to accommodate up to six aircraft with room for future expansion	An existing hangar that can accommodate up to six helicopters is needed to support the aviation uses and needs at the new LAASF and an area that can accommodate the current drill requirements, including breakroom space, classroom, etc.
4 – Proximity to potential noise receptors	The proposed LAASF should be located where it would not cause substantial impact due to increased noise levels.
5 – Sufficient population base/economy	The local community should be able to provide/accommodate up to 14 full-time MTARNG personnel. The location should be near the largest number of MTARNG personnel possible for convenience of travel and attendance at drill. It is preferred that the area have a strong aviation presence or resources that could support recruiting of future aviators.
6 – Proximity to training areas	Proximity to Limestone Hills or Waco training areas and ability to reach a facility without refueling en route.

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Figure 2-3. Alternative Locations

2.4 Evaluated Alternatives

The Billings location was the only alternative that meets all the screening criteria and fulfills the purpose and need of this project. This location would provide improved coverage in eastern Montana, remedying the gaps in aviation coverage. The Billings Logan International Airport has all requisite services for MTARNG, including ATC and tower, radar, fire response, and has a host of services available. Located adjacent to a busy airport, there is existing aircraft noise and the expectation that it will continue. Stationing the LAASF in Billings is the MTARNG's Preferred Alternative and is evaluated in detail in this EA.

Under the Preferred Alternative, the LAASF would be located in a hangar that is privately-owned by Billings Flying Service (BFS) and currently leased by MTARNG, located immediately west of the Billings Logan International Airport (refer to Figure 2-4). BFS operates similar helicopter activities out of the adjacent hangar and helicopter pad. The property is accessed from Highway 3 via AJ Way. Up to two temporary portable offices would be located on the property adjacent to the hangar. Personal vehicles would be parked in the gravel or asphalt lot adjacent to the hangar. The hangar is served by electricity and a septic system. Water is provided via a cistern. MTARNG would develop and execute a plan to sample and test the quality of drinking water. In 2019, MDMA entered into an agreement with BFS to lease hangar space. Under the Preferred Alternative, MTARNG would begin operations out of this hangar.

The 14 full-time personnel would live in their personal residences in Billings or the surrounding area and commute to the hangar daily. On drill weekends, the estimated 90 personnel would travel to the hangar from their residences. Given that Billings is the largest community in Montana and has a higher number of MTARNG personnel living there compared to other locations, it is estimated that 30-40 soldiers would stay in local hotels during drill weekends.

Maintenance hover runs or test flights would be 50-60 minutes or less per aircraft, when required, and would usually be conducted at the Billings airport, or on-site when required, away from established buildings. Maintenance test flights would follow established flight patterns north of Billings. No more than two maintenance test flights per helicopter per week are anticipated. Current training operations include 10-12 trips to Waco Limited Training Area per year, which is anticipated to increase under the Preferred Alternative due to the location of the LAASF.

Operating an LAASF out of Billings would benefit the people of Billings and eastern Montana as well as visitors. MTARNG would be more readily available to assist in responses to emergencies. The MTARNG would be able to aid local search and rescue services, along with assisting local law enforcement when needed.

Locating the LAASF in Billings would be beneficial to the MTARNG aviation program. There are a number of opportunities for students to learn to fly, particularly since Rocky Mountain College has an aviation program. In addition, Rocky Mountain College and Montana State University Billings have Reserve Officers' Training Corps programs that could provide an additional potential source of officers to the MTARNG aviation program. The presence of MTARNG and potential for interaction within the schools would raise awareness to the opportunities that the Guard provides and improve accessibility for students who want to join the Guard.

1 Table 2-2. Alternatives Screening Results by Location. Alternatives Screening Results by Location

Screening Criteria	Billings	Laurel	Miles City
1 – Located to provide aviation coverage for the “coverage gap” depicted in Figures 1-1 and 1-2	All areas lacking coverage addressed.	All areas lacking coverage addressed.	All areas lacking coverage addressed.
2 – Located adjacent to an airport with related services	ATC, tower, radar; fire/rescue through local municipal fire department	No tower, ATC, fire/crash responses, or radar; runway pavement insufficient for helicopters; cannot tie into runway	No tower, ATC, fire/crash response, or radar
3 – Hangar sufficiently sized to accommodate up to six aircraft with room for future expansion	Adequately sized hangar available for lease on private property adjacent to the airport.	Available hangars insufficiently sized; construction would be required; alternate location with more land is cost prohibitive (no access, utilities, or services)	No available hangar; purchase or construction would be required
4 – Proximity to potential noise receptors	Nearest residence 0.33 mile	Nearest residence 0.28 mile	Nearest residence 0.22 mile
5 – Sufficient population base*/economy	Largest community in Montana; flying school in the local college; 304 MTARNG Soldiers, (27 resident 1-189 th Soldiers; largest population base in Montana that fits the recruiting demographic)	While Laurel itself is medium sized, it is close enough to Billings to have sufficient population base; 304 resident MTARNG Soldiers (27 resident 1-189 th Soldiers)	Medium-sized community; flying lessons available; 29 resident MTARNG Soldiers (1 resident 1-189 th Soldier)
6 – Proximity to training areas	Waco – 47 miles Limestone Hills – 202 miles Can reach both without refueling.	Waco – 61 miles Limestone Hills – 188 miles Can reach both without refueling.	Waco – 107 miles Limestone Hills – 352 miles Can reach Waco without refueling.

2 * Small communities (less than 5,000), Medium (5,001-10,000), Large (>10,000)



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2 Figure 2-4. Preferred Alternative Location

2.4.1 No Action Alternative

Under the No Action Alternative, no new aviation facilities would operate on the eastern side of Montana. Training and emergency responses would continue to occur out of Helena. Emergency response by MTARNG to eastern Montana would require the time to mobilize, fly from Helena to Billings (approximately 1.5 hours) and refuel (approximately 1 hour) when weather permits. MTARNG personnel from eastern parts of Montana would travel to Helena monthly for drill weekends. Flights to Waco Limited Training Area would occur less than 10 times out of Helena.

2.4.2 Alternatives Eliminated from Further Consideration

The only alternative that met all the screening criteria is locating the LAASF in Billings (refer to Table 2-2). All other locations that were initially considered feasible because they alleviated the deficiency in aviation coverage failed to have adequate airport facilities and services or infrastructure to accommodate training needs. In addition, the size of the communities, which are all substantially smaller than Billings, would require a greater number of soldiers to travel longer distances to report for training or duty. Finally, with the exception of Laurel, travel to Waco Limited Training Area was longer, and in the case of Glasgow, refueling would be required to reach either Limestone Hills or Waco Limited Training Areas. For these reasons, Glasgow, Glendive, Laurel, Lewistown, and Miles City have been eliminated from further consideration.

2.4.3 Alternatives Impacts Comparison Matrix

Table 2-3 provides a brief summary and comparison of potential impacts associated with the Preferred Action Alternative, operating an LAASF out of Billings, and the No Action Alternative.

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1 Table 2-3. Impact Comparison Matrix

Resource Area	No Action Alternative	Preferred Action Alternative
Land Use	No impact would occur.	No changes in land use, lighting, or visual character. Consistent with existing land use plans and zoning and would not interfere with future development plans. No impact would occur.
Air Quality	No changes in pollutant emissions including Greenhouse Gases (GHGs) would occur. Existing operations would continue from the Helena AASF.	Emissions associated with operations of the LAASF would be small (less than 3 tons per year) and well below the General Conformity Thresholds. There would be an increase in GHG emissions because the LAASF would require heating and electricity to operate in addition to the existing emissions from Helena AASF. Mobile GHG emissions associated with the use of helicopters and other vehicles for training would be the same as existing operations but would be released in Billings instead of Helena. Emissions for commuting to Billings for emergencies would be reduced. Operating from the LAASF would result in a small increase in GHG emissions, and those emissions generated would continue to contribute to climate change.
Noise	No impact would occur.	While there would be minor increases in noise levels due to the Proposed Action, noise levels at all Points of Interest that were modeled would meet federal, state, and local noise regulations. The changes in noise would not result in any incompatible land use. Only three percent of the flights would occur at night, so nighttime noise is not anticipated to be elevated regularly.
Biological Resources	No impact would occur.	The Proposed Action is near an existing airport where wildlife is habituated to continuous noise levels. Increased vehicle and helicopter use could result in injury to wildlife infrequently including migratory birds.
Cultural Resources	No impact would occur.	The Proposed Action would consist of an in-kind use of an existing hangar constructed in 2019 and flight along existing flight paths. No construction would occur. No historic properties would be directly affected. No adverse indirect effects due to visual or auditory changes.
Water Resources	No impact would occur.	There are no surface waters, wetlands, or floodplains on the subject property. Increased demand on septic tank would not overwhelm the tank capacity. Potential to discharge petroleum products or other chemicals due to fueling, maintenance, and operation of helicopters is unlikely due to standard practices, such as secondary containment. No impact is anticipated. Increased availability for MTARNG to respond to large-scale or technically challenging emergencies would benefit eastern Montana.
Socioeconomics and Safety (including Environmental Justice and Protection of Children)	No impact would occur.	Negligible benefit due to increase in demand for hotels and restaurants and 14 full-time positions. Local emergency services would not be negatively affected and the likelihood of a crash over a populated area is negligible. No Environmental Justice populations occur near the site. Children would not be placed at an increased risk. MTARNG availability to respond to large-scale or technically challenging emergencies would benefit eastern Montana.
Infrastructure	No impact would occur.	Negligible impacts to vehicular traffic during drill weekends and to air traffic during training days and operations. Negligible increase in demand for utility services.
Hazardous and Toxic Materials and Waste	Continued potential for accidental petroleum, oil, or lubricant spills during aircraft refueling, general maintenance, or parking personal vehicles at the Helena AASF.	Potential for accidental petroleum, oil, or lubricant spills during aircraft refueling, general maintenance, or parking personal vehicles at the LAASF would be negligible due to the standard practices including secondary containment.

SECTION 3.0

Affected Environment

This section describes the baseline conditions in Billings at the Preferred Alternative's location (refer to Figure 2-4), with emphasis on resources that would potentially be impacted.

The physical, biological, social, and economic values and resources potentially affected by the Preferred Alternative were considered. Not all resources warrant detailed analysis. Resources are analyzed if:

- there is a relatively high potential level of impact and assessment is needed to determine the significance of the impact; or
- there is a disagreement about the best way to use a resource or resolve an unwanted resource condition due to the Preferred Alternative.

Based on best available information, known resource values, and current site-specific data collected during field investigations, the resources listed in Table 3-1 were identified as either not present or not warranting detailed investigations. The table provides the rationale for dismissing each resource.

Table 3-1. Resources Considered but Eliminated from Further Analysis

Resource Area	Not Present	Present/ Not Affected	Rationale
Geology, Topography, and Soils		X	No construction or ground disturbance would occur. The LAASF would operate from an existing hangar. Up to two temporary portable offices may be placed on site, but they would be located on existing pavement.
Prime and Unique Farmland	X		The LAASF parcel is developed with an existing hangar, concrete pad and taxi area, and paved parking area. No farmland would be affected.
Surface Water or Wetland Resources or Floodplains		X	No surface waters or wetlands (USEPA Enviromapper), or floodplains (Federal Emergency Management Agency 2013) occur within the project area. BFS imports potable water and stores it in a cistern. Water quality, water quantity, and floodplains would not be affected by the LAASF.

The LAASF would be located in a hangar that is west of the Billings Logan International Airport where BFS conducts helicopter operations just west of the city limits of Billings, in Yellowstone County, Montana (refer to Figure 2-4). Billings' elevation is 3,126 feet above sea level. The Billings Logan International Airport sits atop of the Rimrocks (Rims), sandstone cliffs approximately 500-feet high in this location and above the majority of Billings. Some MTARNG activity occurs at the Billings Logan International Airport including refueling, responding to emergencies such as search and rescue operations, fire suppression, and evacuations; the airport also is used *en route* to accessing Waco Limited Training Area.

3.1 Land Use

The hangar where the LAASF would be located is currently privately owned by BFS and used for helicopter activities. This site is adjacent to agricultural fields to the west and additional hangars to the east, which are owned and operated by BFS. The Billings Logan International Airport, owned by the City of Billings, is directly to the east of the BFS hangar, and undeveloped land also owned by the City of Billings surrounds the property to the north. Suburban residential neighborhoods are located within the City of Billings south of the hangar and Highway 3 with downtown Billings approximately 2 miles southeast of the hangar.

The land on which the hangar is located is zoned for light industrial uses by Yellowstone County (Yellowstone County 2020). The airport and adjacent land are zoned for public institutional uses, the parcels to the west of the hangar are zoned for agriculture, and the land directly to the south of the property is zoned for commercial uses (Yellowstone County 2020).

The visual character of the subject property is of aviation facilities and parking areas. The visual character of the surrounding area includes existing airport infrastructure present at the Billings Logan International Airport and BFS operations to the east, parking areas and storage to the south, and unirrigated agricultural fields with tall grasses or undeveloped public land to the north and west. The Preferred Alternative location is not readily visible from major roads, is low profile, and blends with surrounding fields. No visually sensitive areas have been identified.

3.2 Air Quality

This section provides baseline information regarding air quality standards, ambient air quality in Billings, and climate change.

3.2.1 Existing Air Quality

The USEPA determines if geographical areas meet federal national ambient air quality standards and state-specific air quality standards. If an area meets the standards, it is considered to be an “attainment area.” If an area does not meet a standard for a specific pollutant, it is referred to as a “nonattainment area.” Once a state has taken measures to reduce emissions and the area has met the standards and additional re-designation requirements in the Clean Air Act, it can be re-designated as a “maintenance area.” Table 3-2 provides the state and federal standards for each criteria pollutant that the USEPA monitors. Billings is a maintenance area for carbon monoxide and sulfur dioxide.

3.2.2 Greenhouse Gases/Climate Change

The Army issued a policy *Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in Army National Environmental Policy Act Reviews* (2021) providing guidance on the inclusion of greenhouse gas (GHG) emissions and Climate Change, as part of the environmental baseline for NEPA analyses prepared in accordance with 32 CFR 651, *Environmental Analysis of Army Actions*.

GHGs are compounds that may contribute to accelerated climate change by altering the thermodynamic properties of the earth’s atmosphere. GHGs consist of carbon dioxide (CO₂), methane, nitrous oxide, and fluorinated gases (USEPA 2021b). Under the USEPA Mandatory Reporting Rule, facilities that emit 25,000 metric tons or more per year of carbon dioxide equivalent (CO₂e) emissions must submit annual reports to the USEPA (USEPA 2013). This EA looks at GHG emissions as a category of air emissions. It also looks at issues of temperature and precipitation trends (climate change) (see Section 4.2.1).

Table 3-2. National Ambient Air Quality Standards

Air Pollutant	Average Time	Federal National Ambient Standards		Montana Ambient Air Quality Standards
		Primary	Secondary	All
Carbon monoxide	1-hour	35 ppm ⁽¹⁾	--	23 ppm
	8-hour	9 ppm	--	9 ppm
Nitrogen dioxide	1-hour	100 ppb ⁽²⁾	--	0.30 ppm
	Annual	53 ppb	53 ppb	0.05 ppm
Ozone	8-hour	0.07 ppm	0.07 ppm	--
	1-hour	--	--	0.10 ppm
PM ₁₀ ⁽³⁾	24-hour	150 µg/m ³ ⁽⁴⁾	--	150 µg/m ³
	Annual	--	--	50 µg/m ³
PM _{2.5} ⁽⁵⁾	24-hour	35 µg/m ³	35 µg/m ³	--
	Annual	12 µg/m ³	15 µg/m ³	--
Settled Particulates	30-day average	--	--	10 g/m ² ⁽⁶⁾
Sulfur dioxide	1-hour	75 ppb	--	0.50 ppm
	3-hour	--	0.50 ppm	--
	24-hour	0.14 ppm	--	0.10 ppm
	Annual	0.03 ppm	--	0.02 ppm
Lead	90-day Calendar Quarter	0.15 µg/m ³	0.15 µg/m ³	1.5 µg/m ³
Hydrogen sulfide	1-hour	--	--	0.05 ppm
Visibility	Annual	--	--	3x10 ⁻⁵ /m scattering coefficient

Source: USEPA 2021c and State of Montana 2021

(1) ppm = parts per million; (2) ppb = parts per billion; (3) PM₁₀ = Particulate matter 10 microns or less in diameter; (4) µg/m³ = microgram per cubic meter; (5) PM_{2.5} = Particulate matter 2.5 microns or less in diameter; (6) g/m² = grams per square meter

Billings has a semi-arid climate with dry, hot summers and cold, dry winters. Average high temperatures range from 36° Fahrenheit (°F) in December to 87°F in July, and average low temperatures range from 18°F in December to 59°F in July (NOAA 2021). On average, Billings receives approximately 14 inches of rain annually (primarily in the spring and fall) and 55 inches of snow in the winter months (NOAA 2021).

The climate in Montana is changing, and temperatures have increased by about 2°F in the past century. Increasingly heat waves are occurring and the snowpack is melting earlier in spring. The persistent droughts are killing trees and other vegetation increasing the potential for and the intensity of forest fires. The continued changing climate is likely to decrease available water in the state and affect vegetation and agricultural yields and further increase the likelihood of wildfires (USEPA 2016).

Currently, aviation training and missions operate out of the Helena AASF. The Helena AASF records 939 metric tons of CO₂ emissions per year (Personal communication between Batson [MDMA] and Myers [MDMA] on 2 November 2021). This volume of emissions is well below the threshold for reporting under the USEPA Reporting Rule. Current emissions for the six helicopters, tactical vehicles, and forklift are listed in Table 3-3. See Appendix C for additional information on how these emissions were calculated.

Table 3-3. Estimated Annual Emissions (tons)*Criteria Pollutant Emissions (tons) by Activity*

Activity	NOx (ton)	SOx (ton)	CO (ton)	VOC (ton)	PM10 (ton)	PM2.5 (ton)
CH-47	1.22	0.08	0.57	0.20	0.23	0.20
UH-72	0.09	0.02	1.27	0.08	0.09	0.09
UH-60	0.67	0.05	0.96	-	0.12	0.10
HEMMT	1.3E-03	3.2E-06	4.7E-04	1.3E-04	3.4E-05	3.1E-05
LMTV	2.0E-04	2.0E-06	4.6E-04	1.4E-04	4.0E-06	4.0E-06
HMMWV	1.6E-04	1.6E-06	1.8E-03	1.1E-04	3.2E-06	3.2E-06
Forklift	1.9E-02	1.6E-03	1.3E-02	3.6E-03	2.3E-03	2.2E-03
Total:	2.00	0.15	2.82	0.28	0.44	0.39

NOx-Nitrous oxides, SOx-sulfur oxides, CO-carbon monoxide, VOC-volatile organic compounds, PM10-particulates 10 microns or less in diameter, PM2.5- particulates 2.5 microns or less in diameter

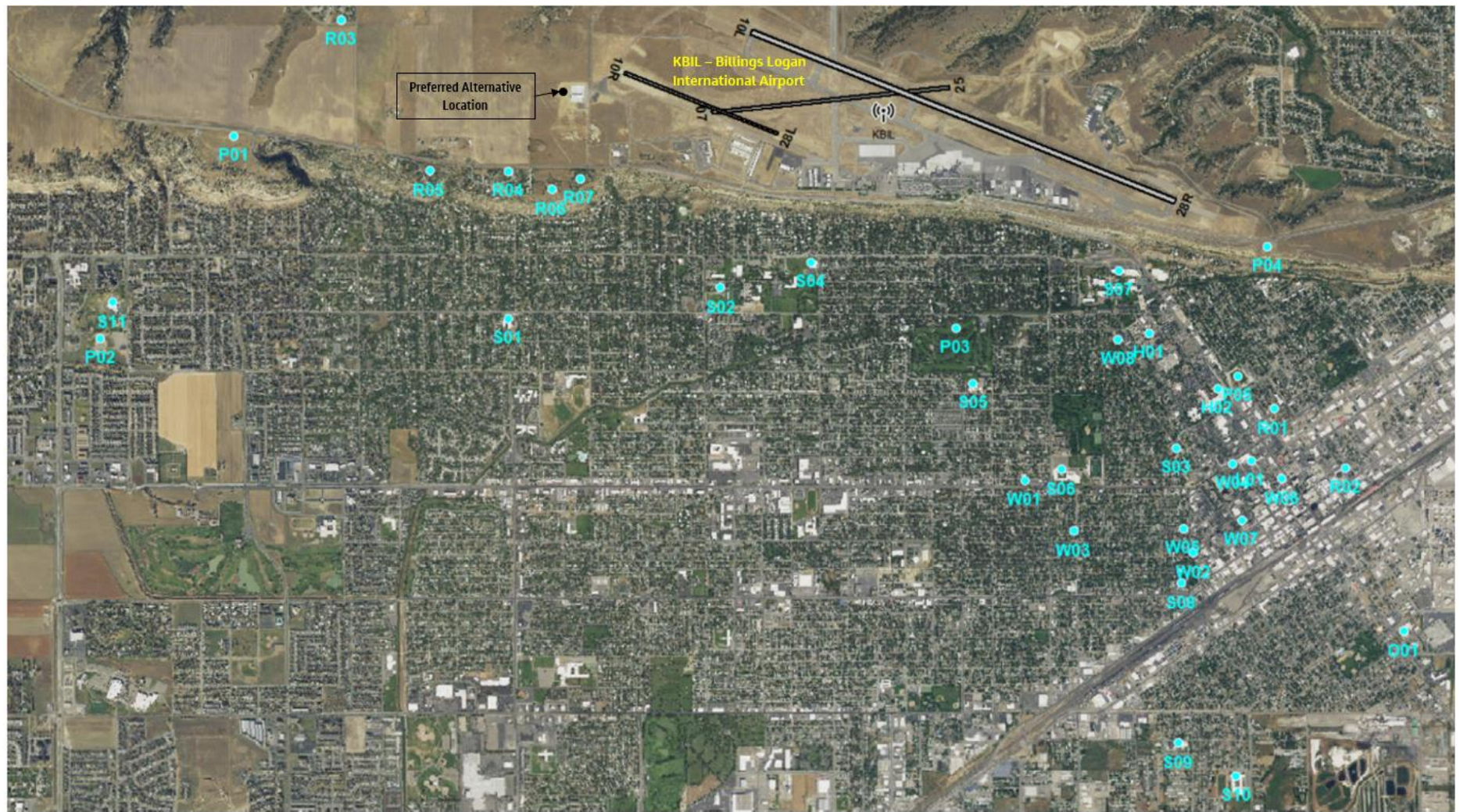
3.3 Noise

Sound is created when an object vibrates and radiates part of its energy as acoustic pressure or waves through a medium, such as air, water, or a solid object. Sound levels are expressed in units called decibels (dB). Noise is generally defined as any loud or undesired sound. Noise levels are also expressed in dB. Since the human ear does not respond equally to all frequencies (or pitches), measured noise levels are often adjusted or weighted to correspond to the frequency of human hearing and the human perception of loudness. The weighted noise level is designated as the A-weighted noise level in decibels (otherwise known as dBA).

Around a military or civilian airfield, the noise environment is normally described in terms of the time-averaged sound level generated by aircraft operating at that facility. For this project, operations consist of the existing fixed-wing and rotary-wing flight activities conducted during an average annual day, including arrivals and departures at the airfield, flight patterns in the general vicinity of the airfield, and maintenance operations.

Day-Night Average Sound Level (DNL) represents the total accumulation of all sound energy, but it is spread out uniformly over a 24-hour period. While DNL provides a single measure of the overall noise impact, it does not provide specific information on the number of noise events or the individual sound levels that occur during the 24-hour period. For example, a daily average sound level of 65 dB could result from only a few loud events or many relatively quiet events.

Outdoor noise levels were computed for 35 Points of Interest (POI) (i.e., noise measurement points) near the proposed LAASF. These POI included hospitals, parks, residential areas, schools, and places of worship. POI are identified in Table 3-4 and depicted in Figure 3-1. Existing noise levels ranged from 44.2 dBA DNL at Riverside Middle School to 65.9 dBA DNL at Swords Park. Primary noise sources include arrivals/departures and activities at the airport, helicopter operations at BFS, road traffic, and other sources typical of an urbanized area. For more information on the noise levels for each POI, refer to the Noise Study Report included in Appendix A.



2 Figure 3-1. Points of Interest

1 Table 3-4. Existing Noise Levels for the Points of Interest

Type	ID	Description	DNL (dBA)	Type	ID	Description	DNL (dBA)
Hospital	H01	St. Vincent Healthcare	58.5	Schools	S03	McKinley Elementary School	53.3
	H02	Billings Clinic Hospital	56.7		S04	Rimrock Learning Center	51.6
Library	L01	Billings Public Library	53.3		S05	Highland Elementary School	52.3
Prison	O01	Montana Women's Prison	49.2		S06	Billings Senior High School	50.5
Parks	P01	Zimmerman Park	50.8		S07	Montana State University Billings	58.1
	P02	Poly Vista Park	48.0		S08	Billings Central Catholic High School	48.5
	P03	Hilands Golf Club	54.2		S09	Orchard Elementary School	44.3
	P04	Swords Park	65.9		S10	Riverside Middle School	44.2
	P05	Dehler Park	57.4		S11	Arrowhead Elementary School	48.3
Residential	R01	Prairie Tower Apartments	55.5	Place of Worship	W01	Trinity Lutheran Church	49.7
	R02	Sage Tower Retirement Apartments	52.5		W02	First Baptist Church	49.5
	R03	Rifle Creek Trail Community	53.2		W03	St. Nicholas Orthodox Church	48.5
	R04	Masterson Circle Community	50.4		W04	First Christian Church	53.2
	R05	Wyatt Circle Community	49.3		W05	American Lutheran Church	50.3
	R06	Stoney Ridge Circle Community	51.5		W06	First Congregational United Church	52.7
	R07	Sky Ranch Community	51.4		W07	St. Patrick Co Cathedral	51.1
Schools	S01	Poly Drive Elementary School	44.9		W08	First English Lutheran Church	58.2
	S02	Rocky Mountain College	49.5				

2 **3.4 Biological Resources**

3 The project area is located in the Great Plains Physiographic Province characterized by being
4 on a high plateau of semiarid grassland with low hills and incised stream valleys (Britannica
5 2021). The site is also located on the urbanized fringe of the City of Billings and adjacent to the
6 Billings Logan International Airport. The site itself is a disturbed lot with structures, a concrete
7 pad and paved parking area. No vegetation occurs onsite. Agricultural fields are adjacent. No
8 ESA listed endangered or threatened species or designated critical habitat occur within the
9 project site (U.S. Fish and Wildlife Service [USFWS] 2021). No special status plant species
10 occur within the project site (MTNHP 2021). Ten species identified as Montana State Species of
11 Concern were identified for the project vicinity, but only eight have the potential to occur onsite,
12 including seven bird species protected under the Migratory Bird Treaty Act (golden eagle,
13 burrowing owl, ferruginous hawk, chestnut-collared longspur, Baird's sparrow, bobolink, and

long-billed curlew) and one bat species (little brown myotis). Additional information regarding the biological resources present within the project site may be found in the Biological Resources Technical Memorandum found in Appendix B.

3.5 Cultural Resources

The proposed LAASF would operate out of a hangar that was constructed in 2019. The area around the hangar is paved or covered in gravel and has all been previously disturbed. The hangar, parking area and helipad comprise the Area of Potential Effects (APE) for direct effects. No historic resources are present.

A larger area that incorporates the flight paths was selected for the Indirect Effect APE. A barn on adjacent private land is historic but is not eligible for listing on the National Register of Historic Places (Montana Cultural Resources Information System [MTCRIS] Form 2008). Efforts to identify historic properties located within the indirect APE of this undertaking included review of MTCRIS files, as well as the National Register of Historic Places (NRHP) database. Research focused on the identification of those properties for which NRHP integrity of setting would be a primary qualifier for their eligibility. A total of 14 individual NRHP-listed buildings and three NRHP-listed historic districts were identified within the indirect APE (Tables 3-2 and 3-3).

Figure 3-2. Historic Properties within the Indirect APE – Individual Buildings

Map ID	NRHP Listing No.	Property Name	Address	Date Listed	NRHP Criteria
1	72000739	Billings Chamber of Commerce Building	303 N. 27 th Ave.	1/20/1972	unknown
2	77000822	Austin North House	622 N. 29 th St.	11/23/1977	unknown
3	72000740	Parmly Billings Memorial Library	2822 Montana Ave.	10/19/1972	unknown
4	82003182	Prescott Commons	Rimrock Rd.	4/30/1982	unknown
5	86000847	Masonic Temple	2806 3 rd Ave.	4/17/1986	unknown
6	86000678	Billings Post Office and Courthouse	2602 1 st Ave.	3/14/1986	unknown
7	02000105	The Electric Building	113-115 Broadway	3/1/2002	A, C
8	05001279	Acme Building	109-111 N. Broadway	11/9/2005	A, C
9	08001228	Oliver Building	2702 Montana Ave.	11/6/2008	A, C
10	08001227	L&L Building	2624 Minnesota Ave.	11/10/2008	A, C
11	10000489	Dude Rancher Lodge	415 N. 29 th St.	7/22/2010	A, C
12	13000153	Babcock Theater Building	114-124 N. 28 th and 2808-2812 2 nd Ave.	4/9/2013	A, C
13	13000369	Northern Hotel	19 N. Broadway	6/12/2013	A, C
14	15000574	McMullen Hall	1500 University Dr.	9/8/2015	A, C

Figure 3-3. Historic Properties within the Indirect APE - Historic Districts

Map ID	NRHP Listing No.	Property Name	Address	Date Listed	NRHP Criteria
A	06000333	Billings Townsite Historic District	2600 (2528), 2604-2606, 2608, 2610-2614, and 2624 Montana Avenue	4/21/2006	A, C
B	06001224	Black Otter Trail	Black Otter Trail	1/5/2007	A
C	79001427	Billings Historic District	Roughly bounded by N. 23 rd St., N. 25 th St., 1 st St., and Montana Ave	3/15/1979	unknown

3.6 Water Resources

No washes, wetlands, or springs occur within the project site (MTNHP 2021). The site is located at the eastern end of the Upper Yellowstone-Lake groundwater basin within the non-glacial Central Groundwater region. Groundwater wells in the vicinity of the site are between 240 and 320 feet deep (MBMG 2021). Water for the site is currently from a 12,000-gallon cistern that stores drinking water delivered to the site, and wastewater goes to an existing septic tank that was constructed in 2019.

BFS is currently improving the existing boulder pit storm water detention system which serves the BFS property. The improvements include a combination of perforated pipe, gravel, and separation fabric. Storm water drainage from the hangars will be conveyed to this detention system.

3.7 Socioeconomics and Safety

According to 2019 Census data, the population of Billings is estimated to be 109,577, growing by approximately 5 percent since 2010, which is slightly less than the overall population growth across Montana statewide for the same time period (U.S. Census Bureau 2019a). Approximately 2.5 percent of the population in Billings is unemployed, which is the same level of unemployment statewide in Montana (U.S. Census Bureau 2019b). The median household income in Billings is \$58,394, slightly higher than the statewide median household income (U.S. Census Bureau 2019b). According to 2019 Census data, approximately 96 percent of all housing units are occupied within Billings (U.S. Census Bureau 2019b).

The Billings Public School Community includes 22 elementary schools, 6 middle schools, and 3 high schools with nearly 16,800 students enrolled (Billings Public Schools 2021). Student to teacher ratios vary by school but are generally higher than the state average, particularly in the high schools within the district (GreatSchools.org 2020).

The closest general hospital to the hangar is the St. Vincent Healthcare facility that is open 24-hours a day and includes a Level II Trauma Center (SCL Health 2021). The Billings Fire Department provides fire suppression services, emergency medical care, and first response within the City of Billings and within the Billings Urban Fire Service Area, which includes the hangar where the LAASF would be located (Billings Fire Department 2020).

As the largest city in Montana, Billings offers numerous stores, restaurants, hotels, and other businesses and services to residents and visitors. The Billings Department of Parks, Recreation,

and Public Lands manages the City of Billings' parks and recreation system, which offers approximately 2,580 acres of parkland including 171 park areas, 40 playgrounds, 29 basketball courts, 19 tennis courts, 66 horseshoe pits, over 100 athletic fields, 30 miles of paved use trails, 2 outdoor pools, 2 wading pools, a dog park, a batting cage facility, a par 3 golf course, and a minor league baseball stadium (Billings Department of Parks, Recreation and Public Lands 2021).

Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks (21 April 1997), identifies that studies are demonstrating that children may suffer disproportionately from environmental health and safety risks because 1) children's' bodily systems are not fully developed, 2) they eat, drink, and breathe more in proportion to their body weight, 3) their size and weight may diminish protection from standard safety features, and 4) their behavior patterns may make them more susceptible to accidents. For these reasons, the President directed federal agencies to make it a high priority to identify and assess environmental health and safety risks that may disproportionately affect children. The President also directed each federal agency to ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health or safety risks.

The hangar would be used for helicopter activities and generally children would not present. During times when children are present, precautions would be taken for their safety, including limiting access to areas that pose risks and through adult supervision.

3.8 Environmental Justice

Title VI of the Civil Rights Act of 1964 and related statutes ensure that individuals are not excluded from participation in, denied the benefit of, or subjected to discrimination under any program or activity receiving federal financial assistance because of race, color, national origin, age, sex, or disability. *Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, directs that programs, policies, and activities not have a disproportionately high and adverse human health and environmental effect on minority and low-income populations. In addition, *Executive Order 14008, Tackling the Climate Crisis at Home and Abroad* directs federal agencies to achieve environmental justice as part of their missions by developing programs, policies and activities to address the disproportionately high and adverse impacts on human health, environmental, climate-related and other cumulative impacts on these communities as well as the accompanying economic challenges of such impacts.

Minority populations occur where either: 1) the minority population of the affected area exceeds 50 percent or 2) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis, such as the county or state. A minority population also exists if there is more than one minority group present and the minority percentage, as calculated by aggregating all minority persons, meets one of the above-stated thresholds (CEQ 1997).

The U.S. Census Bureau defines low-income population areas as a "poverty area" where 20 percent or more of the residents have incomes below the poverty level, and an "extreme poverty area" has 40 percent or more residents that are below the poverty level. The criteria for determining poverty level are applied nationally, except for Alaska and Hawaii, without regard to the local cost of living.

The population in Billings is predominantly comprised of people who identify as white, with Hispanic or Latino being the second most common followed by those who identify as American Indian/Alaskan Native (Table 3-5). The distribution of races in the localized population, captured

Table 3-5. Geographic Distribution of Minorities, Count/Percentage

Area	Total	White	African-American	American Indian/Alaskan Native	Asian	Native Hawaiian/Pacific Islander	Other Race	Hispanic or Latino*
Montana	1,068,778	940,423 87.99%	7,787 0.73%	67,603 6.33%	8,927 0.84%	224 0.02%	7,297 0.63%	40,314 3.77%
Yellowstone County	161,300	144,096 89.33%	1,586 0.98%	7,623 4.73%	1,123 0.70%	0 0%	1,328 0.82%	8,928 5.54%
Billings	109,577	97,052 88.57%	1,586 1.45%	5,272 4.81%	785 0.72%	0 0%	1,026 0.94%	6,926 6.32%
CT 14.02, BG3 Yellowstone County	1,395	1,353 96.99%	0 0.00%	15 1.08%	0 0%	0 0%	0 0%	0 0%

* Persons of Hispanic or Latino origin may be of any race; CT- Census Tract, BG – Block Group; Source: U.S. Census Bureau 2019b

by block group information, indicates fewer people identify as a minority in the block group than compared to the state, county, and city counts. No minority population was identified in the block group. Poverty levels in Billings (8.09 percent) are slightly higher than Yellowstone County (7.76 percent) and slightly lower than all of Montana (9.49 percent, Table 3-6). The distribution of poverty in the localized population, captured by block group information, indicates the number of people who live below the poverty level is lower in the project vicinity than compared to the state, county, and city counts. No low-income population was identified in the project area.

Table 3-6. Geographic Distribution of Poverty, Count/Percentage

Area	Total	Total below poverty level, age 18-64	Total below poverty level, over 64	Combined Total below poverty level
Montana	1,042,682	81,499 7.82%	17,495 1.68%	98,994 9.49%
Yellowstone County	157,348	9,901 6.29%	2,304 1.46%	12,205 7.76%
Billings	106,578	7,243 6.80%	1,380 1.29%	8,623 8.09%
CT 14.02, BG3 Yellowstone County	1,110	49 4.41%	10 0.90%	59 5.32%

CT- Census Tract, BG – Block Group; Source: U.S. Census Bureau 2019c

In addition to the Census data, the USEPA EJScreen was used to compare environmental and demographic indicators for the project area (the hangar and a 1-mile buffer) to the rest of the state and country to assess potential impacts to environmental justice populations (Table 3-7 and Appendix C). The USEPA EJScreen uses percentiles to compare whether the population within the project area has an equal or lower potential for exposure, risk, proximity to certain facilities, or minority/poverty level compared to the state, region, and/or U.S. The greater the percentile, the greater the potential for exposure or risk or the greater the minority/low-income population.

Table 3-7. EJScreen Reported Minority and Low-Income Averages and Percentiles

Socioeconomic Indicator	Project Area Value	State Average	Percentile in State	National Average	Percentile in the Nation
People of Color	6%	14%	33	40%	13
Low Income	14%	32%	11	31%	23
Linguistically Isolated	0%	0%	83	5%	45

The results of the EJScreen for the project area indicated that 6 percent of the population in the study area is minority compared to the state's 14 percent and the nation's 40 percent. Accordingly, 33 percent of the state's population has a lower percent minority as compared to the study area, and 13 percent of the nation's population has a lower percent minority. For income, 14 percent of people within the project area are classified as low income. Compared to the project area, 11 percent of the state and 23 percent of the national population is equal to or has a lower income. Based on this data, those within the project area and the one-mile buffer do not constitute an Environmental Justice community.

3.9 Infrastructure

This section describes both transportation and utility infrastructure associated with the affected area.

3.9.1 Transportation Infrastructure

The transportation infrastructure in the vicinity of the LAASF is shown in Figure 3-2. The existing BFS hangar is accessible from Highway 3 using AJ Way, a north-south road on the western perimeter of the Billings Logan International Airport. The average daily traffic in this area of Highway 3 is between 10,000 and 11,000 vehicles (Billings-Yellowstone County Metropolitan Planning Organization 2020). City planners report anticipated growth in office/professional service mixed use west of Rod and Gun Club Road and industrial park uses west of the airport. Ongoing development within Rehberg Ranch, located approximately 1 mile to the northwest of the hangar, and city traffic from Zimmerman Trail that feeds into Highway 3 approximately 1.5 miles west of the airport perimeter road, may be expected to add to the average daily traffic with residential growth. The proposed Northwest Billings Connector would create a new 5-mile-long arterial roadway that begins at the intersection of Highway 3 and Zimmerman Trail Road and connects with Alkali Creek Road. City planners report that with construction of the connector, Highway 3 would be a controlled access roadway and that entry from Highway 3 to AJ Way would be via a right-turn lane. Average daily traffic volumes in 2040 on Highway 3 are projected to increase to nearly 13,700 west of AJ Way to nearly 15,800 east of AJ Way (HDR 2021).

BFS, a business that specializes in aerial firefighting and heavy lift services with Chinook helicopters, is located just west of the airport. BFS also owns and operates a maintenance, repair, and overhaul facility for the CH-47 Chinook. The BFS facilities are proposed as the base of operations for the MTARNG LAASF. BFS has space available for MTARNG soldiers to park personal vehicles during training and drills.



1
2 **Figure 3-4. Transportation Infrastructure in the LAASF Vicinity**

3.9.2 Airport Infrastructure and Operations

The Billings Logan International Airport is a city-owned and operated airport with three runways and associated taxiways located on the Rimrocks, a 500-foot cliff that overlooks downtown Billings. The airport serves seven passenger carrier airlines and two cargo/mail carrier airlines. Approximately 30 passenger flights arrive and depart daily. Airside facilities include land, runways, taxiways, aircraft parking ramps, aircraft storage hangars, Fixed Based Operators and other aircraft related businesses, airport operations, maintenance and fire-fighting facilities, fueling facilities, and navigational aids. Landside facilities include the passenger terminal, a 120-foot air traffic control tower that was completed in 2005, car rental wash facility, and automobile parking (Billings Aviation & Transit Department 2009).

For the 12-month period ending December 31, 2018, the airport had 87,872 total operations. The breakdown of those operations includes about 30 percent air taxi, 30 percent transient general aviation, 26 percent local general aviation, 13 percent commercial, and 1 percent military (Federal Aviation Administration 2021).

For safety, airports need to be situated near compatible land uses. The potential for flight emergencies and accidents is higher during take-off and landing than in other flight operations. Noise is also greatest in the runway environment and is a factor in identifying compatible uses. BFS operates helicopters; while it is segregated from fixed-wing aircraft operations for safety, the flight operations and associated noise are compatible with airport operations.

3.9.3 Utilities

Natural gas at the Billings Logan International Airport is supplied by Montana Dakota Utilities, and electricity is provided by Northwestern Energy (City of Billings 2010). Located just west of the airport, the BFS facility and the hangar available for MTARNG lease to the west of the BFS facility is assumed to use the same service providers for gas and electricity at its hangar. Underground electric and natural gas utility lines are on the BFS site (Personal communication Heringer [BFS] and Myers [MDMA] on 4 November 2021). Water is transported to the site and stored in a 12,000-gallon cistern. A septic system is used for human waste disposal and solid waste is removed by Republic Service. The Billings Regional Landfill has an estimated lifespan of 50 years if the volume of waste currently processed continues; diverting recyclables would further extend the lifespan (City of Billings 2021). As demand for new or upgraded utilities are identified, utilities would be installed along AJ Way.

3.10 Hazardous and Toxic Materials/Wastes

The proposed LAASF hangar was constructed in 2019 on land that was previously used to pasture horses, and that had been used as polo grounds from about 1947 to 1952 (MTARNG 2019a). The hangar has a concrete floor with no floor drains. Restroom facilities are connected to a septic system located south of the hangar. Parking areas and other areas around the hangar are paved. Material stockpiles and equipment are parked on the parcel adjacent to the proposed site. A concrete apron is located north of the hangar. Storm water runs off paved surfaces to a boulder drain field. This drain field is being improved to include a combination of a perforated pipe, gravel, and separation fabric. No visible ground staining or dumped material was noted during a June 2021 field review.

A Phase I Environmental Site Assessment for the project site was published in October 2019. Based on that assessment, the site is not identified on regulatory databases, and no active regulated facility exists within 1-mile of the site. No *de minimis* conditions, historical recognized

1 environmental concerns, controlled recognized environmental conditions, or recognized
2 environmental conditions were noted in the site assessment. A *de minimis* condition generally
3 does not present a threat to human health or the environment and generally would not be the
4 subject of an enforcement action if brought to the attention of appropriate governmental
5 agencies. A Recognized Environmental Condition is a past release of any hazardous
6 substances or petroleum products that has occurred in connection with the property and has
7 been addressed to the satisfaction of the applicable regulatory authority (MTARNG 2019a).
8 According to the USEPA EnviroMapper, no new or active incidents or conditions occur within
9 one mile of the proposed LAASF (USEPA 2021a).

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SECTION 4.0

Environmental Consequences

Section 4.0, Environmental Consequences, identifies potential direct and indirect effects of the identified project alternatives on each of the resource areas presented in this section.

4.1 Land Use

Criteria used to identify impacts on land use include whether the changes would conflict with local land use plans and zoning ordinances; contribute to nuisance issues such as light, noise, or odors; or affect land uses by limiting current or future development capabilities. Land use impacts would be significant if the proposed LAASF would not comply with zoning ordinances, result in noise that violates acceptable standards (see Section 4.3), result in light that disrupts or vibration that damages the use of the land or the structures nearby, or inhibit development plans that have been approved by the local municipality or governing agency.

4.1.1 Effects of the Proposed Action

MTARNG would use an existing facility in an area that is already used for helicopter activities. There would be no change in land use, lighting, or visual character of the area. The existing zoning is consistent with local plans and would not interfere with development plans that have been approved by Yellowstone County. Noise generated is consistent with airport uses. Refer to Section 4.3 for additional noise impact information.

4.1.2 Effects of the No Action Alternative

Land use would continue to evolve and develop based on Billings, Yellowstone County, and Billings Logan International Airport plans. No land use impact would occur.

4.1.3 Best Management Practices and Mitigation

No BMPs are warranted for the proposed action. No mitigation measures would be necessary because no significant adverse environmental impacts would occur.

4.2 Air Quality

Criteria used to identify the potential impacts on air quality include whether proposed activities would result in a decrease in ambient air quality. Significant impacts would occur if either alternative would 1) generate emissions greater than the General Conformity Rule *de minimis* thresholds (40 CFR 93.153); or 2) contribute to a violation of any federal, state, or local air regulations; or 3) result in a violation of an existing air permit.

4.2.1 Effects of the Proposed Action

Aircraft emissions were estimated using the number of landing and take-offs (LTOs) and the number and duration of low flight patterns (LFPs). LTO counts were applied to engine setting profiles found in Table 2-4 of the Mobile Guide (AFCEC 2020) to determine total time in engine mode. Emission factors and fuel flow rates found in Table 2-8 of the same guidance were also used. Emission estimates for the CH-47 Chinook and the UH-72 Lakota were made using a surrogate aircraft--the CH-53 Sea Stallion. The MH-139 was used as a surrogate for the UH-72 Lakota. Surrogates were selected based on similar mission capabilities, engine type and size. Table 4-1 summarizes the data used to calculate emissions.

Auxiliary Power Units (APUs) were also included in the analysis of emissions for the UH-60 Black Hawk. An APU is a small engine that provides power to an aircraft before or after take-off while the aircraft engine is not on. An APU typically operates for 1 hour per Black Hawk LTO.

Table 4-1. Aircraft Operations by Aircraft Type and Sortie

Aircraft	LTO Count	LFP Count	LFP Duration (min)
CH-47 Chinook	122	1171	2.9
UH-60 Black Hawk	122	1171	2.9
UH-72 Lakota	122	659	2.9

Military tactical vehicles were estimated based on vehicle miles traveled. Up to four Heavy Expanded Mobility Tactical Trucks (HEMMTs), eight High Mobility Multipurpose Wheeled Vehicles (HMMWVs or Humvees), two Light Military Tactical Vehicles (LMTVs) and one forklift are anticipated to be used at the LAASF. HEMMTs were modeled as Heavy-Duty Diesel Vehicles (HDDVs) and LMTVs and Humvees were modeled as Light Duty Diesel Vehicles (LDDV). Emission factors from Table 5-21 of the AFCEC Mobile Guidance (AFCEC 2020) were applied to mileage estimates. Estimates are based on approximately 5 miles and 30 minutes of operation for each vehicle type. Forklift operation was estimated using emission factors from Table 3-6 of the AFCEC Mobile Guidance (AFCEC 2020). The forklift annual usage was estimated as 104 hours per year, with an engine size of 55 horsepower and a 30 percent load factor.

The Preferred Alternative would result in continued minimal emission from aircraft, APUs, and vehicles, but with the emissions released in a different location. The emissions generated by travelling between Helena and Billings to respond to emergencies, both by aircraft and soldiers travelling to Helena to report for duty, would no longer be emitted. The increases in the Billings area airshed due to moving aircraft operations there were found to be insignificant when compared to the General Conformity thresholds. Further, overall, the net change of emissions due to this action is likely to be a reduction in emissions or neutral. Table 4-2 summarizes estimated emissions compared to the General Conformity *de minimis* thresholds. The Preferred Alternative would not cause an exceedance of any federal, state, or local regulation, including national ambient air quality standards listed in Table 3-2 and would not cause the Billings area to be in nonattainment. The relocation of existing activities would not require an air quality permit. For additional information, refer to Appendix D.

Table 4-2. Estimated LAASF Annual Emissions and General Conformity *De Minimis* Thresholds (tons/year)

Pollutant	NO _x	SO _x	CO	VOC	PM ₁₀	PM _{2.5}
Estimated Emissions	2.0	0.15	2.8	0.28	0.44	0.39
General Conformity Threshold	100	100	100	100	100	100
Potentially Significant Impact	No	No	No	No	No	No

Greenhouse Gases/Climate Change

GHG emissions would be generated during the operation of the proposed LAASF due to heating and powering the hangar and from helicopter operations. Based on the USEPA's Simplified GHG Emissions Calculator, these new operations would result in the generation of between 66

and 75 metric tons of carbon dioxide equivalents (CO₂e)¹. However, the difference in miles travelled for MTARNG soldiers to report to the LAASF in Billings would result in a reduction of approximately 6 metric tons of CO₂e. Further, BFS has used power at the subject hangar in the past, so some of the CO₂e associated with electricity would not be new. Emissions at Helena AASF may decrease due to reduced activities at that facility. The quantity of emissions from helicopter and equipment operations for training (approximately 1,053 metric tons) would not change, but they would be released in the Billings area instead of Helena. However, helicopter travel in response to an emergency situation currently required between Helena and Billings would be minimized due to helicopters being stationed in Billings. Operating from the LAASF would result in a minor increase in GHG emissions, and those emissions generated would continue to contribute to climate change.

The anticipated increases in temperature and drought in the West associated with climate change would contribute to an increase in the intensity and frequency of wildfires and the potential for severe storms that may cause flooding. This potential increase in wildfires and floods would increase the need for MTARNG to respond to emergencies. Having a second location from which to operate would improve response times and may contribute to faster containment of wildfire, benefiting the natural environment and affected communities.

4.2.2 Effects of the No Action Alternative

The No Action Alternative would result in no changes in air quality. The number and type of activities would remain consistent with current levels and at the same location under the No Action Alternative.

Greenhouse Gases/Climate Change

The No Action Alternative would result in no changes in air quality. The number and type of activities would remain consistent with current levels in Helena under the No Action Alternative. MTARNG would continue its current use of fossil fuels for heating, electricity, helicopters, and equipment, resulting in minor but unchanged emissions of both criteria pollutants and GHGs.

4.2.3 Best Management Practices and Mitigation

Best management practices for the proposed action would be to minimize and combine vehicle trips, minimize idling times, and maintain well-tuned engines to help reduce pollutant emissions.

4.3 Noise

Impacts are assessed on whether they would result in a change in noise levels. Noise impacts would be determined significant if introduced noise (1) results in the violation of applicable federal, state, or local noise regulation; (2) creates appreciable areas of incompatible land use; or (3) causes the nighttime acceptable noise level to be consistently greater than existing levels.

4.3.1 Effects of the Proposed Action

Under the Proposed Action, the 65 dBA DNL contour stays on BFS and Billings Logan International Airport property except for a small area that extends east of Airport Rd into Swords Park. The major contributors of the noise represented by the DNL contours surrounding the airport are the large and heavy air carrier jets such as the Boeing 737 and Airbus A320. The Proposed Action 55 dBA DNL contour is either directly on top of the No Action 55 dBA DNL

¹ CO₂e refers to the mass emitted of a given GHG and its specific global warming potential. Global warming potential indicates how much a given GHG could contribute to global warming relative to how much warming would be caused by the same mass of carbon dioxide.

contour or is within 100 feet of the contour for much of the perimeter of the contour. The Proposed Action DNL contours only extend outside of the No Action contour in the areas south and southeast of the proposed MTARNG LAASF (Figure 4-1).

POIs were established so that representative locations could be modeled to compare noise level changes for various areas in the study area. For the POI noise analysis, only one location, Swords Park (P04), has a DNL over 65 dBA (Table 4-3). However, the DNL noise level at this park currently exceeds 65 dBA and the Proposed Action does not increase the noise at this location. The largest impacts for the Proposed Action are at the locations directly south of the proposed LAASF. These include R04 – the Masterson Circle Community (increase of 3.7 dBA), R06 – the Stoney Ridge Circle Community (increase of 4.2 dBA), R07 – the Sky Ranch Community (increase of 5.2 dBA), S04 – the Rimrock Learning Center (increase of 1.7 dBA), and S01 – Poly Drive Elementary School (increase of 1.2 dBA). It is important to note that the DNL at each of these locations is less than 60 dBA in the Proposed Action. For acoustic nighttime operations, the Proposed Action results in at most a 0.2 percent increase in the probability of awakening at the POI locations.

Noise levels in Helena near the AASF would decrease and noise levels in the Billings area are anticipated to increase by the same amount. While some noise levels would increase due to the Proposed Action, noise levels at all POI would meet all federal, state, and local noise regulations. The changes in noise would not result in any incompatible land use. Only three percent of the MTARNG operations would occur at night. Nighttime disturbance was calculated based on the probability of awakening at the POI. When comparing the Proposed Action to the No Action Alternative, there is an increase of 0.1 or less percent probability that someone with their windows open would be awoken at all the POIs but one, Masterson Circle Community, where there is a 0.2 percent increased likelihood. When windows are closed, this probability is lower. Nighttime noise increases would be negligible.

Additional Billings Logan International Airport flights, as well as other developments, traffic, and activities would also contribute to the noise environment over time. Given the relatively low projected noise levels, even when combined with other noise sources, resulting noise levels would not violate noise regulations, create incompatibilities with existing land uses, or create night noise conditions that would be consistently louder. Cumulative impacts would be negligible.

4.3.2 Effects of the No Action Alternative

Helicopter activities at the BFS hangar would change over time consistent with the business' plans. In addition, future increases in air traffic at the Billings Logan International Airport would likely occur. Noise levels would change correspondingly. Over time, it is likely that noise levels would also increase. Noise levels associated with the Helena AASF would remain unchanged from existing conditions and would increase over time due to development and increased operations at the Helena airport.

4.3.3 Best Management Practices and Mitigation

No BMPs are warranted for the proposed action. No mitigation measures would be necessary to reduce adverse noise impacts to below significant levels.

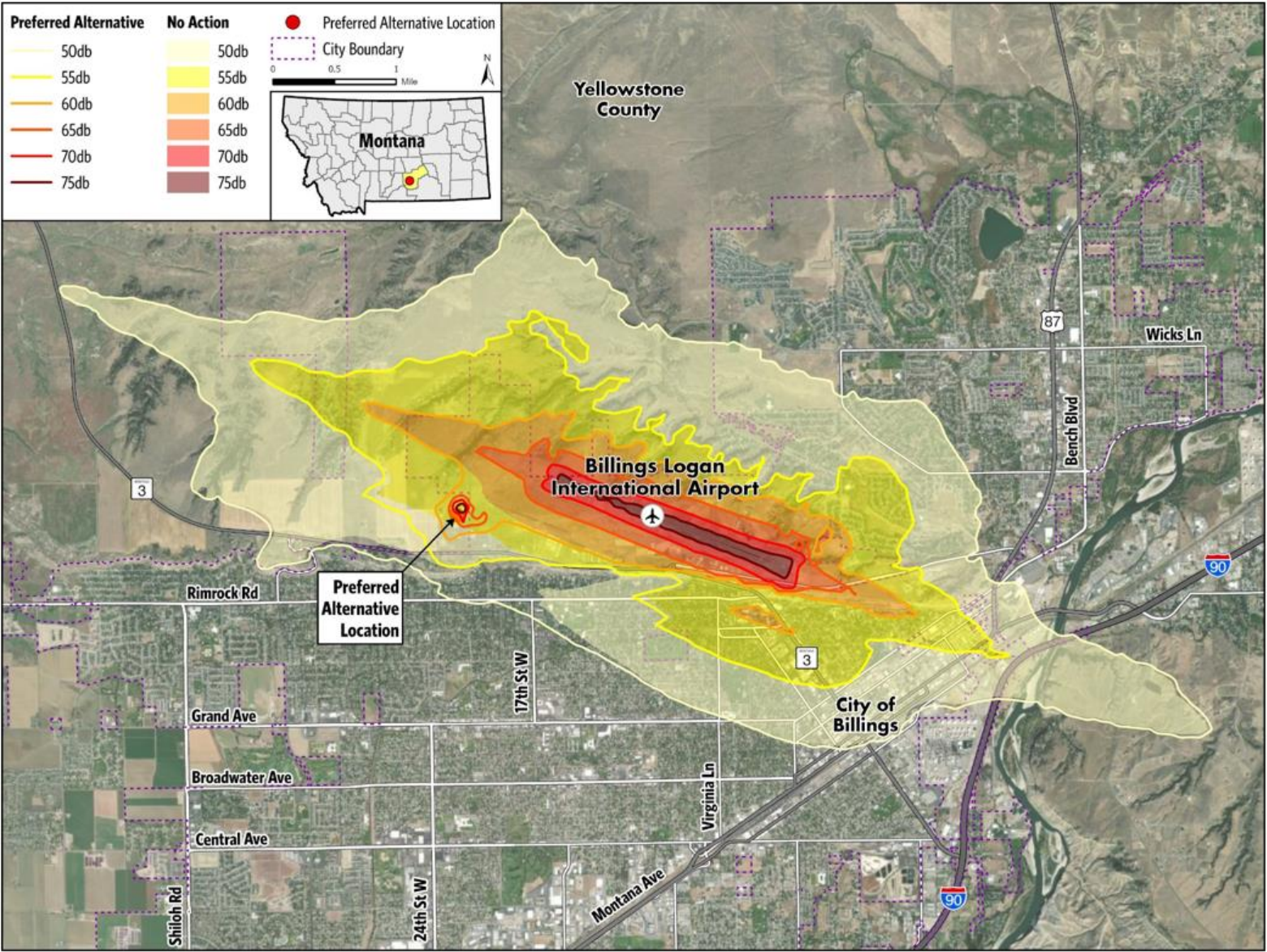


Figure 4-1. Predicted Noise of the Preferred and No Action Alternatives

1 Table 4-3. Noise at POIs for the No Action Compared to the Proposed Action in dBA DNL

ID	Description	No Action	Proposed Action	Change	ID	Description	No Action	Proposed Action	Change
H01	St. Vincent Healthcare	58.5	58.6	0.1	S03	McKinley Elementary School	53.3	53.4	0.1
H02	Billings Clinic Hospital	56.7	56.8	0.1	S04	Rimrock Learning Center	51.6	53.3	1.7
L01	Billings Public Library	53.3	53.4	0.1	S05	Highland Elementary School	52.3	52.5	0.2
O01	Montana Women's Prison	49.2	49.3	0.1	S06	Billings Senior High School	50.5	50.6	0.1
P01	Zimmerman Park	50.8	51.0	0.2	S07	Montana State University Billings	58.1	58.3	0.2
P02	Poly Vista Park	48.0	48.1	0.1	S08	Billings Central Catholic High School	48.5	48.6	0.1
P03	Hilands Golf Club	54.2	54.4	0.2	S09	Orchard Elementary School	44.3	44.3	0
P04	Swords Park	65.9	65.9	0	S10	Riverside Middle School	44.2	44.3	0.1
P05	Dehler Park	57.4	57.5	0.1	S11	Arrowhead Elementary School	48.3	48.4	0.1
R01	Prairie Tower Apartments	55.5	55.6	0.1	W01	Trinity Lutheran Church	49.7	49.8	0.1
R02	Sage Tower Retirement Apartments	52.5	52.6	0.1	W02	First Baptist Church	49.5	49.7	0.2
R03	Rifle Creek Trail Community	53.2	53.4	0.2	W03	St. Nicholas Orthodox Church	48.5	48.6	0.1
R04	Masterson Circle Community	50.4	54.1	3.7	W04	First Christian Church	53.2	53.3	0.1
R05	Wyatt Circle Community	49.3	51.1	1.8	W05	American Lutheran Church	50.3	50.4	0.1
R06	Stoney Ridge Circle Community	51.5	55.7	4.2	W06	First Congregational United Church	52.7	52.8	0.1
R07	Sky Ranch Community	51.4	56.6	5.2	W07	St. Patrick Co Cathedral	51.1	51.3	0.2
S01	Poly Drive Elementary School	44.9	46.1	1.2	W06	First Congregational United Church	52.7	52.8	0.1
S02	Rocky Mountain College	49.5	50.5	1.0					

4.4 Biological Resources

Impacts on biological resources are discussed in terms of impacts on vegetation, wildlife species and their habitat, and special status species of plants and animals. Significant impacts would occur if a species ceased to occur in the localized area as a result of proposed activities such as a loss of available habitat, and these impacts could not be mitigated. MTARNG sent USFWS a scoping letter requesting information related to potential environmental issues within the project's scope and location on August 6, 2021. USFWS responded to the scoping letter on August 19, 2021. USFWS responded that it had no comments regarding federally listed, proposed threatened or endangered, or other trust species. The scoping letter sent to USFWS may be found in Appendix E.

4.4.1 Effects of the Proposed Action

The main source of disturbance to wildlife from LAASF operations would occur from helicopter activities and noise (e.g., aircraft overflights). Ongoing aviation activities affect wildlife, and those effects would continue, although with a minor increase in quantity if the project is authorized. No ESA-listed species or habitat for ESA-listed species occurs in the project area, so none would be affected. The addition of helicopters, vehicles, and personnel would increase the noise levels in and adjacent to the project site. However, the project is located adjacent to an existing airport where aircraft noise already exists and will continue. Wildlife inhabiting the project area likely have habituated to the continuous noise generated by aircraft using the airport and the presence of people.

Direct impacts to wildlife, including disturbance occurring from human activities required for military training would be long term with the duration of military operations. Vehicle use for personnel accessing the training facility could result in incidental injury to wildlife. Mortality to birds (bird strike) could occur with the addition of flights but would be limited since 14-21 flights per helicopter per week are anticipated. Effects to birds could include those protected by the Migratory Bird Treaty Act. Measures for reducing conflicts of aircraft with wildlife, in particular bird strike, are a component of the federally mandated Wildlife Hazard Management Plan for the adjacent Billings Logan International Airport. With the proximity to the airport, the proposed LAASF would also benefit from these already implemented measures.

As other planned developments along Highway 3 and in residential areas are implemented, open areas available to wildlife would continue to slowly diminish and mortality or incidental injury would increase. Impacts to wildlife from these combined changes would be minor.

4.4.2 Effects of the No Action Alternative

No additional military operational activities would occur under the No Action Alternative. Noise from helicopter flights or vehicle use would continue at the Helena AASF. Biological and natural resources at the Helena AASF would continue to be affected by ongoing military operations, including noise and disturbances associated with human activities from helicopter and vehicle use.

4.4.3 Best Management Practices and Mitigation Measures

No BMPs are warranted for the proposed action, and no mitigation measures will be necessary to reduce adverse environmental impacts to below significant levels.

4.5 Cultural Resources

Cultural resources are evaluated based on the potential to affect the context, location, or character of the resources as a result of the proposed actions. Impacts to cultural resources would be considered significant if an alternative alters the character, setting, or feeling of a historic resource such that it is no longer eligible for listing in the NRHP or causes a disruption to unique archaeological resources in or eligible for listing in the NRHP.

4.5.1 Effects of the Proposed Action

The Proposed Action would result in in-kind use of the existing hangar, parking area, and helicopter pad within the project area. The helicopters would follow existing flight paths that are in use by helicopters. No ground disturbing activities would occur. No historic properties would be directly affected by this action. There are no known impacts to Native American sacred sites.

Given that the proposed flight paths that MTARNG would use would follow existing, in-use flight paths from the leased hangar and the adjacent Billings Logan International Airport, any visual effects to historic properties would be temporary and limited in duration. Any historic property within the project's indirect APE has been crossed by these flight paths from the historic era up to the present day. Therefore, historic properties in the indirect APE would not be visually affected by the introduction of additional LAASF flights.

Most of the historic properties within the indirect APE fall within areas where the existing noise generated by airport use and the future noise levels as a result of the Proposed Action are the same (Figure 4-2). No indirect auditory effect is anticipated. The exceptions include Building 3/Parmly Billings Memorial Library; Building 9/Oliver Building and Building 10/L&L Building (refer to Table 3-3, Figure 4-2). These buildings fall at the far southern end of the indirect APE. At these locations, a slight increase in noise (an estimated 0.1-0.2dBA) is expected. This increase would not be perceptible and is within accepted state, national, local levels of noise. These properties are located in a developed urban environment, and the slight increase in ambient noise is not considered to be significant enough to adversely affect the historic setting of these buildings.

4.5.2 Effects of the No Action Alternative

Under the No Action Alternative, the existing use of the BFS facilities would continue, and all MTARNG activities would continue out of Helena. No construction or impact on cultural resources would occur. There would be no impact on Native American sacred sites. Ongoing flight operations out of Billings Logan International Airport would continue to overfly historic buildings and historic districts.

4.6 Water Resources

As noted in Table 3-1, there are no surface waters, wetlands, or floodplains on the subject property. Groundwater is present.

Water resources are evaluated based on whether the water quality or quantity would be affected. Impacts would be significant if the proposed activities result in a decline in water quantity or quality to a point that water used to support the needs of domestic use and habitat/species would be incapable of meeting the demand or of sustaining the populations living or depending on them.

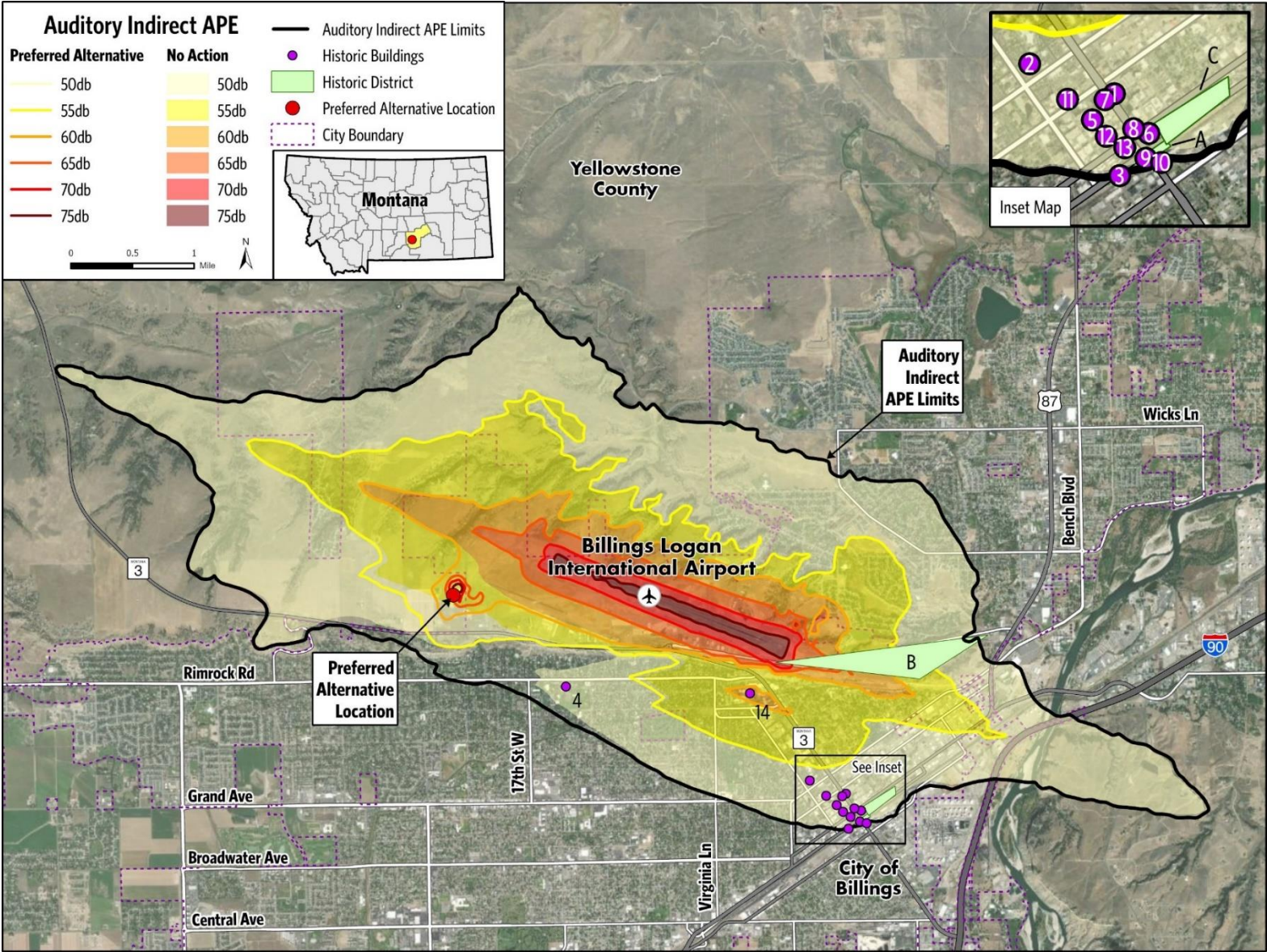


Figure 4-2. Historic Properties within the Indirect APE

4.6.1 Effects of the Proposed Action

Operating the LAASF out of the Billings hangar would increase the demand on the existing septic tank. For drill weekends, portable toilets would be brought in if more than 75 people report to the hangar to reduce the demand on the septic system. The septic tank is new and has an estimated remaining life of at least 45 years, based on the average life of a septic tank. Further, given how deep the groundwater is in this area, contamination is not likely. No impact is anticipated due to increased septic tank use.

No ground disturbance or construction is proposed that would result in erosion or sedimentation that could be discharged as runoff into nearby watercourses. However, the fueling, maintenance, and operation of helicopters at the LAASF has the potential to discharge petroleum products or other chemicals. MTARNG would develop and comply with a SPCC Plan to prevent and control spills. Secondary containment would be used as directed in the SPCC Plan. Spills are not anticipated, but if a spill occurred, the SPCC Plan would identify the appropriate response and reporting measures to minimize potential adverse impacts to groundwater and/or nearby watercourses. Both BFS and MTARNG hangars and pad areas feed to a drain field that is adequate to accommodate storm water runoff for both BFS and MTARNG activities and will retain potential accidental releases on-site; cumulatively, these activities would not result in an adverse impact. No impact to water resources is anticipated.

4.6.2 Effects of the No Action Alternative

Under the No Action Alternative, the existing demand on the septic system at the BFS facilities would continue at the current levels. BFS operations would continue have the potential for petroleum or other chemical release. Should this occur, BFS would respond based on their SPCC plan. The demand for water, the processing of wastewater and human waste, and the drainage systems at the Helena ASSF would not change. The potential for accidental releases of petroleum, oils, and lubricants also would not change, and would continue to be mitigated in conformance with the SPCC Plan for that facility. The No Action Alternative would not affect water resources.

4.6.3 Best Management Practices and Mitigation

To manage the potential for adverse water resource impacts under the Proposed Alternative, MTARNG would develop and implement a SPCC Plan to prevent spills and minimize impacts of any spill, should one occur. No mitigation measures would be necessary to reduce adverse environmental impacts to below significant levels.

4.7 Socioeconomics and Safety

In the evaluation of socioeconomic impacts, the following factors are considered: effect on population; changes in employment opportunities and associated effect on income in the region; effect on the housing market, community services, and recreation; and whether the actions will result in public health or safety concerns or affect emergency service response times. Significant impacts would occur if either alternative were to alter the demographics of a local population or if it were to change the local population growth rate; housing market; housing vacancy rate; or availability of jobs, goods, and services.

4.7.1 Effects of the Proposed Action

With only 14 full-time staff, the Proposed Action would not impact Billings population, income in the region, housing market or vacancy rate, demographics, schools or the availability of jobs or goods even if all 14 staff were to relocate to Billings. Fourteen jobs would be available within

1 Billings, approximately 9 of which would be new hires. During training weekends, demand for
2 hotel rooms and dining within Billings would increase, but it would not result in any service being
3 overwhelmed, even when considered in combination with other development and growth in
4 Billings. The increase in jobs and demand for services would result in a negligible benefit on the
5 regional income.

6 While there would be localized increased traffic on drill weekends and during annual training in
7 the vicinity of the LAASF (refer to Section 4.8.1 for traffic impacts), emergency services would
8 continue to operate acceptably without interruption and with acceptable response times.
9 MTARNG contributions to responding to large-scale or technically challenging emergency
10 situations would be improved, which would be a benefit to eastern Montana.

11 Flight operations would follow approved flight paths. These paths overfly some developed
12 areas, but the potential for an accident is low. The Proposed Action is not anticipated to result in
13 any adverse socioeconomic or health and safety impacts.

14 Children would not customarily be present on the LAASF site, and if they are present, it would
15 be under adult supervision. Areas that could pose a risk would be kept inaccessible. Some
16 schools and homes are under or near the flight tracks; however, the increase in noise would be
17 minor (refer to Section 4.3.1), and the potential for a crash would be very low. No change in the
18 impact to the safety and welfare of children would occur.

19 **4.7.2 Effects of the No Action Alternative**

20 Under the No Action Alternative, there would be no change to operations occurring out of the
21 BFS hangar. No impact would occur to population, income in the region, housing market or
22 vacancy rate, demographics, schools, emergency services, or the availability of jobs, services,
23 or goods.

24 **4.7.3 Best Management Practices and Mitigation Measures**

25 No BMPs are warranted for the proposed action. No mitigation measures would be necessary to
26 reduce adverse environmental impacts to below significant levels.

27 **4.8 Environmental Justice**

28 In evaluating impacts on environmental justice, significant impacts would occur if either
29 alternative were to cause disproportionate and adverse impacts to low-income or minority
30 populations.

31 **4.8.1 Effects of the Proposed Action**

32 There are no minority or low-income populations in the project vicinity. No impact would occur.

33 **4.8.2 Effects of the No Action Alternative**

34 Potentially reducing helicopter operations out of the Helena AASF would not result in any
35 adverse impacts to the surrounding area, regardless of race, nationality, or economic status.

36 **4.8.3 Best Management Practices and Mitigation**

37 No BMPs are warranted for the proposed action. No mitigation measures would be necessary to
38 reduce adverse environmental impacts to below significant levels.

4.9 Infrastructure

The impact evaluation of each alternative on infrastructure considered whether services would be interrupted; if demand for service would increase beyond the capacity of the providers; and if the existing infrastructure is compatible and/or can expand to accommodate new needs.

The evaluation of impacts on traffic and transportation considered if traffic generated by the action would result in increased congestion on the regional roadways; if roads would deteriorate due to the type or number of vehicles; if roads would be temporarily or permanently closed or access changed; and if railroads or airports/airfields in the region would experience a notable change in demand for service.

Significant impacts would occur if a strain on utilities, solid waste disposal, or roadways such that they are unable to keep up with the increased demands would occur. In addition, a significant impact would occur if the traffic volumes or vehicle mix were to degrade the quality of the road surfaces resulting in a failure of the facility or unmanageable maintenance costs.

4.9.1 Effects of the Proposed Action

Traffic and the demand on the existing transportation network would change minimally with the Proposed Action. The LAASF would be staffed by 14 full-time employees, increasing the traffic on Highway 3 by a fraction of a percent. On drill weekends, approximately 90 soldiers would be expected to train at the LAASF, potentially increasing traffic on Highway 3 by 1 percent. Many of the participants would be expected to live in the community, reducing the influx of traffic into Billings. Impacts to the transportation network both within Billings and in the region would be negligible. Any change in vehicle miles traveled on highways within the region would be imperceptible because of the small number of soldiers involved and because their hometowns are dispersed. In addition to proposed MTARNG activities, there are plans for other development in the vicinity and along Highway 3 which would also contribute to traffic. Overall, both individually and cumulatively, the implementation of the Proposed Action would result in negligible impact on traffic.

MTARNG LAASF air operations would be conducted within designated air traffic patterns (Billings Logan International Airport Traffic Control Tower, BFS, and MTARNG 2021) and with direction from the Air Traffic Control tower at Billings Logan International Airport to align departure and arrival corridors to be best suited with the urban interface and noise compatibility.

On training days and during operations that engage all six helicopters proposed to be operated at the LAASF, flight operations would increase 2.5 percent beyond average daily operations at Billings Logan International Airport. Locating the LAASF in the vicinity of BFS facilities provides a compatible land use and avoids having noise-sensitive receptor in an area where MTARNG proposes training and operations. Over time, additional flights at the airport would likely occur which would combine with the proposed MTARNG activity. Cumulatively, the increase in flight operations would not result in an adverse impact as there is capacity for this expanded activity.

MTARNG proposes to establish an agreement with the Billings Logan International Airport to conduct hover operations on Airport grounds and away from established buildings. A maintenance test flight tentatively would be identified and established north of Billings over a low population density area with minimal noise impacts.

MTARNG operations at the proposed LAASF in Billings would have a negligible demand for utility services and would not be expected to prompt upgrades to the existing infrastructure.

4.9.2 Effects of the No Action Alternative

With the No Action Alternative, MTARNG operations and training would continue to be confined to Helena, Montana. Effects on the existing transportation, airfield and airspace, and utility infrastructure would be unchanged. Development in the vicinity and increases in Billings Logan International Airport would occur over time.

4.9.3 Best Management Practices and Mitigation

No BMPs are warranted for the proposed action. No mitigation measures would be necessary to reduce adverse environmental impacts to below significant levels.

4.10 Hazardous and Toxic Materials/Wastes

This section addresses the potential impacts associated with existing contaminated sites and the potential for environmental impacts caused by hazardous materials/waste management practices resulting from inadvertent releases of petroleum, oils, or lubricants. Hazardous materials/wastes, asbestos, and lead-based paint are discussed in this section. Significant impacts would occur if proposed activities would result in the discharge or generation of hazardous materials to a level that would permanently adversely affect the health and safety of personnel at the proposed LAASF facilities or the neighboring communities.

4.10.1 Effects of the Proposed Action

Under the Proposed Action, the hangar would house up to six helicopters and provide space for helicopter maintenance activities. Petroleum, oils, and lubricants for the aircraft and support equipment would be stored in accordance with the Hazardous Materials and Waste Management Plan (MTARNG 2019b) in approved storage containers. Operations would include refueling the aircraft on-site. Fuel would be purchased from local vendors or the airport fixed-base operator and transported to the LAASF using a 5,000-gallon over-the-road tanker. While an accidental fuel spill could occur while storing fuel trucks or during refueling operations, fuel would be expected to be confined to the portable secondary containment, and spilled fuel would be addressed in accordance with the site SPCC Plan.

The LAASF would be staffed by 14 full-time personnel who would park personal vehicles on the BFS property; the existing parking facilities would also accommodate up to 90 soldiers participating in periodic weekend drills and other training. Light medium tactical vehicles, high mobility multipurpose wheeled vehicles, trailers, and a forklift would be used to support the LAASF. Vehicles parked on site potentially may leak petroleum, oil, or lubricants; however, such releases would be expected to be minor and infrequent, and paved surfaces on the site are designed to drain storm water to a boulder drain field to prevent off-site releases. No other development or activity at the BFS facility or adjacent area has been identified. No cumulative impacts are anticipated.

The hangar where the LAASF would be located was constructed in 2019 after lead-based paint and asbestos had been phased out. Therefore, the Proposed Action would not pose any public health threats related to exposure to lead-based paint or asbestos.

4.10.2 Effects of the No Action Alternative

No change in ongoing operations would occur under the No Action Alternative. The potential for accidental petroleum, oil, or lubricant spills at the Helena AASF may occur with aircraft refueling, general maintenance, or from soldiers parking personal vehicles on site during drills and operations. Implementation of the SPCC Plan for the site and use of secondary

containment features would continue. No potential exposure to lead-based paint or asbestos would occur under the No Action Alternative.

4.10.3 Best Management Practices and Mitigation

BMPs under the Proposed Action would include parking fuel trucks within portable secondary containment when not in use. All activities would comply with the Hazardous Material and Waste Management Plan and the SPCC Plan.

4.11 Summary of BMPs and Mitigation Measures

The following section summarizes the BMPs previously identified by resource area. No potentially significant adverse environmental impact was identified for any resources evaluated, so no mitigation measures are necessary to reduce environmental impacts to less-than-significant levels.

4.11.1 Best Management Practices

BMPs are standard environmental protection measures that the MTARNG routinely implements as part of their “standard business practices” for new and existing activities, as applicable and appropriate. Standard operating procedures specific to the operation of the Billings LAASF would be developed and implemented. In addition, to maintain their stewardship posture, the MTARNG would implement the following BMPs, at a minimum and as appropriate, for this Proposed Action:

Air Quality

- Minimize and combine vehicle trips, minimize idling times, and maintain well-tuned engines to help reduce pollutant emissions.

Water Resources

- Develop and implement a site-specific SPCC plan to prevent and control spills.

Hazardous and Toxic Materials

- Store fuel trucks within portable secondary containment when not in use and develop and comply with the Hazardous Material and Waste Management Plan and the SPCC Plan.

4.11.2 Mitigation Measures

Mitigation measures are defined as project-specific requirements, not routinely implemented by the MTARNG, necessary to reduce identified potentially significant adverse environmental impacts to less-than-significant levels. No mitigation measures are required for the proposed action because no potentially significant impacts were identified.

SECTION 5.0

Comparison of Alternatives and Conclusions

5.1 Comparison of the Environmental Consequences of the Alternatives

As summarized in Section 2.4.3, Table 2-3, all impacts would be minor in intensity and continue for the duration of operations of the LAASF. The Proposed Action would potentially result in minor adverse impacts on biological resources and noise, and negligible impacts on socioeconomics, air quality, vehicular and air traffic, utilities, and hazardous materials. GHG would continue to be emitted but no change in quantity is anticipated.

The No Action Alternative was not found to satisfy the purpose of and need for the project. This alternative would not provide additional aviation support to serve eastern Montana and coverage for military training and rescue response, improved emergency response times, or increased training opportunities. Reduced operational costs would not be realized. The No Action Alternative would result in continued emissions of air pollutants and GHGs and noise generation at the Helena AASF.

No mitigation is required. Best management practices would be implemented to minimize potential impacts.

5.2 Conclusions

The Proposed Action would expand the MTARNG aviation capabilities and fill a coverage deficiency for helicopter responses to eastern Montana. Operating an LAASF out of Billings would improve accessibility to military training opportunities, improve emergency response time, increase training opportunities with interagency partners, and reduce operational costs by reducing travel from Helena and the associated fuel, time, and aircraft wear and tear.

The evaluation documented in this EA concludes there would be no significant adverse impact on the local environment or quality of life associated with the approval of the Proposed Action Alternative. The analysis in this EA determines, therefore, that an EIS is unnecessary for approval of the Proposed Action Alternative and that a FNSI is appropriate. This EA recommends approval of the Proposed Action Alternative.

SECTION 6.0

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SECTION 7.0

List of Preparers

7.1 National Guard Bureau and MTARNG Staff

The following National Guard Bureau and MTARNG staff were instrumental to the preparation and review of this EA.

Name	Title	Role, Responsibility	Degree	Years of Experience
COL Rob Oleson	Director Aviation and Safety	Aviation and safety programs manager	BS, Professional Aeronautics and Aviation Safety MS, Strategic Studies	33
COL Todd Verrill	Construction Facilities Management Officer	Oversees facilities management, leases for MTARNG	BS, Environmental Science MS, Engineer Management	26
LTC Adel Johnson	Environmental Bureau Manager	Oversees implementation of NEPA	BS, Environmental Engineering	27
LTC Noah Genger	AASF Commander/Battalion Commander	Plan development for 1-189 th GSAB/AASF	BA, Economics MA, Military Operations	20
1LT Kevin Stein	SAAO Project Officer	Coordinated aviation info for EA	BS, Business Administration	8
Rick Lamach	Plans & Programing Bureau Manager	Planning and development for MTARNG	BS, Liberal Studies MA, Military History	7
Rebekah Myers	Environmental Impact Specialist	EA Project Manager	BS, Biology	20
Edward Morrison	Associate General Counsel (Environmental and Real Property), NGB	Legal sufficiency review		
Ricky French	NGB NEPA Reviewer	Environmental Review		

1 **7.2 Jacobs/BRRC Staff**

2 The following Jacobs and BRRC staff were instrumental to the preparation of this EA.

Name	Title	Role, Responsibility	Degree	Years of Experience
Kyle Benne	GIS Technician	GIS/Graphics	MS, Urban Planning BA, Geography	6
Sabra Bushey	Environmental Planner	Land Use, Socioeconomics and Safety, Environmental Justice	JD BS, Environmental Science and Policy	3
Beth Defend	Sr. Environmental Planner	Utilities and Infrastructure, Hazardous Materials QA/QC	BA, Technical Journalism	39
Joe D'Onofrio	Sr. Environmental Planner	Air Quality/Noise QA/QC	MEP, Environmental Planning BS, Mechanical Engineering	31
Jill Harris	Sr. Environmental Planner/Biologist	Biological Resources	MS, Environmental Planning BS, Wildlife and Fisheries Biology and Management	30
Ben Manning	Sr. Engineer/Noise Specialist	Noise	MS, Mechanical Engineering BS, Mechanical Engineering	18
Nancy Shelton	Sr. Environmental Planner	EA Project Manager and Primary EA Author	MEP, Natural Resource Management BA, Political Science	21
Michelle York	Air Quality Engineer	Air Quality	BS, Chemical Engineering	21

3

1 **SECTION 8.0**

Agencies and Individuals Consulted

2 Scoping letters were sent to the parties identified in Table 8-1. This includes tribes and agency stakeholders. An example of the
 3 letters is included in Appendix E. Letters notifying the agencies, including SHPO, and the Tribes and Tribal Historic Preservation
 4 Offices have been sent

5 **Table 8-1. Tribes and Agencies Consulted during the Development of the EA**

Title	Name	Organization	Address	City	State	Zip Code
	Joe Nye	Federal Aviation Administration, Helena FSDO	2725 Skyway Dr	Helena	MT	59602
	Montana Operations Region 8	U.S. Environmental Protection Agency	10 West 15 th St, Suite 3200	Helena	MT	59626
Field Supervisor	Jodi Bush	U.S. Fish and Wildlife Service	585 Shepard Way, Suite 1	Helena	MT	59601
Chairman	Bobby Komardley	Apache Tribe of Oklahoma	P.O. Box 1330	Anadarko	OK	73005
Chairman	Timothy Davis	Blackfeet Nation Tribe	P.O. Box 850 All Chiefs Square	Browning	MT	59147
Chairman	Harlan Baker	Chippewa Cree Tribe	P.O. Box 544	Box Elder	MT	59521
Chairwoman	Shelly Fyant	Confederated Salish & Kootenai Tribes	P.O. Box 278 42487 Complex Blvd	Pablo	MT	59855
Chairman	Frank Whiteclay	Crow Tribe of Indians	P.O. Box 19 Bacheeitché Ave	Crow Agency	MT	59022
Attorney	Thor Hoyte	Crow Tribe of Indians	6405 Hawks Prairie Rd NE	Olympia	WA	98516
President	Andrew Werk Jr.	Fort Belknap Indian Community	656 Agency Main St	Harlem	MT	59526
Chairman	Gerald Gray	Little Shell Chippewa Tribe	625 Central Ave West	Great Falls	MT	59401
President	Donna Fisher	Northern Cheyenne Tribe	P.O. Box 600 Cheyenne Ave	Lame Deer	MT	59043

SECTION 8.0**Agencies and Individuals Consulted**

Chairman	Devon Boyer	Shoshone-Bannock Tribes of the Fort Hall Reservation	P.O. Box 306	Fort Hall	ID	83203
Title	Name	Organization	Address	City	State	Zip Code
Director	Chris Dorrington	Montana Department of Environmental Quality	1520 East Sixth Ave	Helena	MT	59620
MEPA Coordinator	Jen Lane	Montana Department of Environmental Quality	1520 East Sixth Ave	Helena	MT	59620
Director	Henry Worsech	Montana Department of Fish, Wildlife and Parks	1420 East Sixth Ave	Helena	MT	59620
MEPA Coordinator	Linnaea Schroeer	Montana Department of Fish, Wildlife and Parks	1420 East Sixth Ave	Helena	MT	59620
Director	Amanda Kaster	Montana Department of Natural Resources	1625 11 th Ave	Helena	MT	59601
MEPA Coordinator	Sierra Farmer	Montana Department of Natural Resources	1625 11 th Ave	Helena	MT	59601
Director	Malcom Long	Montana Department of Transportation	P.O. Box 211001	Helena	MT	59620
MEPA Coordinator	Tom Gocksch	Montana Department of Transportation	P.O. Box 211001	Helena	MT	59620
State Historic Preservation Officer	Peter Brown	Montana State Historic Preservation Office	1301 East Lockey Ave	Helena	MT	59620
Sheriff	Lawrence C. Big Hair	Big Horn County Sheriff's Office	121 3 rd St West	Hardin	MT	59034
Sheriff	Josh McQuillan	Carbon County Sheriff's Office	102 Broadway Ave North	Red Lodge	MT	59068
Sheriff	Robert Pallas	Golden County Sheriff's Office	107 Kemp St	Ryegate	MT	59074
Sheriff	Shawn Lesnik	Musselshell County Sheriff's Office	820 Main St	Roundup	MT	59072
Sheriff	Charles Kem	Stillwater County Sheriff's Office	400 East 3 rd Ave North	Columbus	MT	59109

SECTION 8.0**Agencies and Individuals Consulted**

Title	Name	Organization	Address	City	State	Zip Code
Sheriff	Wayne Robinson	Treasure County Sheriff's Office	307 Rapelje Ave	Hysham	MT	59038
Commissioner	Donald Jones	Yellowstone County Commission	P.O. Box 35000	Billings	MT	59107
Commissioner	John Ostlund	Yellowstone County Commission	P.O. Box 35000	Billings	MT	59107
Commissioner	Denis Pitman	Yellowstone County Commission	P.O. Box 35000	Billings	MT	59107
Sheriff	Mike Linder	Yellowstone County Sheriff's Office	2323 2 nd Ave North	Billings	MT	59101
Chief	Pepper Valdez	Billings Fire Department	210 North 27 th St	Billings	MT	59101
	Airport Administration	Billings Logan International Airport	1901 Terminal Cir	Billings	MT	59105
Chief	Rich St. John	Billings Police Department	220 North 27 th St	Billings	MT	59101
Mayor	Bill Cole	City of Billings	210 North 27 th St	Billings	MT	59101
City Administrator	Chris Kukulski	City of Billings	210 North 27 th St	Billings	MT	59101
	City Council	City of Billings	P.O. Box 1178	Billings	MT	59103
		Big Sky Search and Rescue	P.O. Box 160063	Big Sky	MT	59716
		Carbon County Search and Rescue	235 Upper Red Lodge Creek Rd	Red Lodge	MT	59068
Captain	Philip Schmidt	Civil Air Patrol	P.O. Box 1887	Great Falls	MT	59403
		Stillwater County Search and Rescue	P.O. Box 729	Columbus	MT	59019